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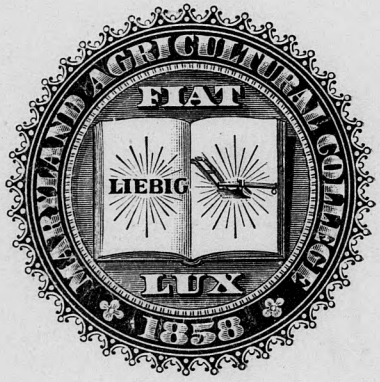

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Contributions and Correspondence Invited.

ADDRESS

Chemical Department, Maryland Agricultural College,

COLLEGE PARK, MD.

ANALYSIS OF

COMMERCIAL FERTILIZERS SOLD IN MARYLAND

BY THE CHEMICAL DEPARTMENT OF THE

MARYLAND AGRICULTURAL COLLEGE.

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Beginning with this, the first number of the Quarterly, the results of the analysis of the various fertilizers on sale in the state will be published in the Quarterly, instead of being published in the Experiment Station bulletins as formerly.

The trade in fertilizers during the last season has been more brisk than for some time previously, with the natural increase in prices as the result. The increased prices of farm products has had a marked effect in producing this result. We find another cause in the fact, that sulphur and nitrates are "contraband of war," and our supply is all imported. Sulphur is the principal ingredient used in the manufacture of sulphuric acid, or oil of vitriol, which is so largely used in the manufacture of fertilizers. Iron pyrites, a compound of iron and sulphur which is abundant in this country, has, in recent years, largely supplanted the imported sulphur in the manufacture of sulphuric acid.

The greatest fluctuation has been in nitrate of soda, which doubled in price about three months ago; this was not maintained, however, the price falling till at the present writing it is about $55 per ton, and still tending downward. At the price mentioned, "ammonia" costs nearly 14½ cents per pound.

This department has not attempted to follow these rapid fluctuations by adopting a special schedule for "ammonia" in this form and determining it separately from the other forms.

In the following table the figures under "Nitrogen," "Potash," and "Phosphoric Acid," indicate percentage or pounds of the respective ingredients in each hundred pounds of fertilizer, giving in parallel columns the amount "found" by analysis and that "guaranteed" by the manufacturer.

The "number" in the tables is that by which the samples are known in the laboratory, the "comparative value found" and the "comparative value guaranteed" are calculated, the former from the analysis found in the laboratory, the latter from the guaranteed analysis as printed on the bags, using the following schedule:

In Mixed Fertilizer:

For Nitrogen, calculated as Ammonia	15	cts.	per	pound.
" Potash (K_2O), in forms free from muriate	6	"	"	"
" Potash (K_2O), as muriate	5	"	"	"
" Available Phosphoric Acid	5	"	"	"
" Insoluble Phosphoric Acid	2	"	"	"
" " " " when from S. C. Rock	1	"	"	"
In Dissolved S. C. Rock:				
Available Phosphoric Acid	4	"	"	"
In Ground Bone:				
For Nitrogen, calculated as Ammonia, in "Fine" Bone	14	"	"	"
" Nitrogen, calculated as Ammonia, in "Fine Medium" Bone	12	"	"	"
" Nitrogen, calculated as Ammonia, in "Medium" Bone	10	"	"	"
" Nitrogen, calculated as Ammonia, in "Coarse" Bone	8	"	"	"
" Phosphoric Acid in "Fine" Bone	5	"	"	
" " " " "Fine Medium" Bone	4	"	"	"
" " " " "Medium" "	3	"	"	
" " " " "Coarse" "	2	"	"	
In Tankage:				
For Nitrogen, calculated as Ammonia	12	"	"	"
" Phosphoric Acid	3	"	"	"

In using the above schedule all fertilizers containing less than 1 per cent of ammonia will be given the rock valuation of 4 cents per pound on the available phosphoric acid.

The schedule has been changed from 3½ to 4 cents per pound for available phosphoric acid in dissolved S. C. Rock.

In the use of these tables too much weight should not be given to slight differences in analysis, because in factory work it is not possible to make absolutely uniform mixtures. This accounts for the fact that different small lots taken from the same large pile frequently show considerable variation upon analysis; in fact, there may occasionally be considerable variation between samples drawn from different parts of the same bag.

The "comparative values" given in the table are not claimed to be the proper prices to be paid for the various fertilizers at the place of sale or use; this varies considerably, depending on the current market price of the ingredients, freight rates, commissions, size of order, cash or credit, etc., etc. Other things being equal, buy fertilizers from the firm who will sell the goods wanted for the least money, as is the general rule in the purchase of other goods.

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No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4990	Alexandria Fert. & Chem. Co., Alexandria, Va.	Dissolved S. C. Rock...	Hancock.....
4610	Armour Fert. Co., Chicago, Ill.	Fruit and Root Fertilizer	Hillsboro.....
4615	" " " "	Grain Grower.....	Greensboro.....
4609	Baltimore Guano Co., Baltimore, Md.	Baltimore Special	Hillsboro.....
4698	" " " "	Baltimore Special Wheat Mixture	Baltimore.....
4589	" " " "	B. G. Ammoniated Bone Phosphate.	Baltimore.....
4543	" " " "	B. G. Potato Fertilizer...	Baltimore.....
4588	" " " "	Defiance Bone.....	Baltimore.....
4592	" " " "	Farmers' Dissolved Bone.	Baltimore .....
4542	" " " "	Fish Guano.....	Baltimore.....
4593	" " " "	Salvador Guano.....	Baltimore.....
4544	" " " "	Truckers Favorite.....	Baltimore.....
4590	" " " "	7% Guano.....	Baltimore.....
4728	Baltimore Pulverizing Co., Baltimore, Md.	Farmers' Favorite Fertilizer.	Germantown.....
4727	" " "	Penniman's Tobacco Grower.	Germantown.....
4558	" " "	Special Potato Mixture..	Baltimore .....
4638	Baltimore Seed & Implement Co., Baltimore, Md.	Ammoniated Soluble Bone Phosphate.	Baltimore.....
4637	" " "	Standard Bone Phosphate.	Baltimore.....
*4579	Baugh & Sons Co, Baltimore, Md.	Animal Bone & Potash Compound for all Crops	Baltimore.....
4626	" " " "	Bone Meal—Warranted Pure.	Baltimore.....
4634	" " " "	Corn Fert. for Sugar Corn and Garden Truck.	Baltimore.....
4691	" " " "	Crop Grower.....	Lapidum.....
4627	" " " "	Dissolved Animal Bones —Warranted Pure.	Baltimore.....

*In Bulletin No 49, August, 1897, the guarantee of Potash in this brand was given as 3 per cent ; it should have been 2 per cent., as above.

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4990	....	.....	....	.....	2.28	13.43	14	15.71	15.50	$10.74	$11.20
4610	2.71	2	6.22	5	2.30	10.32	8	12.62	10	25.59	19.80
4615	2.73	2	2.92	2	3.96	8.31	8	12.27	10	21.18	16.80
4609	1.07	1	2.62	2	2.40	7.87	9	10.27	11	14.66	14.80
4693	1.10	1	2.16	2	2.64	7.94	9	10.58	11	14.46	14.00
4589	1.60	1 50	2.29	2	2.39	8.48	8	10.87	10	16.53	15.30
4543	2.86	2.50	3.03	3	2.03	9.33	9	11.36	11	21.75	20.30
4588	.....	.....	2.01	2	2.56	8.95	10	11.51	.....	9.68	10.00
4592	.....	.....	....	.....	2.10	12.20	14	14.30	15	9.76	11.20
4542	2.41	2	2.61	2	2.61	7.02	8	9.63	.....	17.90	16.00
4593	0.00	12	5.48	4 50	1.29	5.99	7	7.28	.....	10.63	46.10
4544	5.30	6	4.25	4	1.70	7.35	7	9.05	.....	28.18	29.00
4590	6.08	.....	....	.....	1.44	7.24	.....	8.68	.....	26.06	.....
4728	1.03	1	1.52	3.25	1.90	5.14	5.50	7.04	.....	10.61	11.75
4727	2.81	2	3.06	2	2.00	7.33	7	9.33	.....	20.03	15.00
4558	2.24	2	4.07	4	3 75	4.74	5 50	8.49	12	17.03	15.50
4638	.96	1	1.82	1.50	1.32	8.29	7	9.61	8	13.52	11.90
4637	1.64	2	1.81	1.50	2.36	9.71	9	12.07	10	17.38	16.90
4579	2.37	2	2.13	2	2.22	9.12	8	11.34	10.50	19.25	17.00
4626	4.81	4	.....	.....	.....	.....	.....	22.09	21.50	29.35	.....
4634	2.19	2	....	.....	1.68	8.68	8	10.36	11	15.92	15.20
4691	2.21	2	2.30	2	1.75	8.24	8	9.99	.....	17.87	16.00
4627	2.21	2	.....	.....	2.43	15.95	15	18.38	19	23.55	22 60

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4573	Baugh & Sons Co., Baltimore, Md.	Dissolved Animal Bones	Baltimore
4575	" " " "	Dissolved Steamed Bones	Baltimore
4601	" " " "	Domestic Animal Bone Dust.	Baltimore
4534	" " " "	Double Eagle Phosphate	Baltimore
4562	" " " "	Export Bone with Potash	Baltimore
4554	" " " "	General Crop Grower	Baltimore
4541	" " " "	H. G. Acid Phosphate or Dissolved S. C. Rock	Baltimore
4587	" " " "	High Grade Potato Guano.	Baltimore
4551	" " " "	High Grade Tobacco and Truck Fertilizer,	Baltimore
4608	" " " "	New Process 10% Guano.	Baltimore
4600	" " " "	Potato Fertilizer	Baltimore
4616	" " " "	Soluble Alkaline Super-Phosphate.	Baltimore
4571	" " " "	Special Potato Manure	Baltimore
4070	" " " "	Special Mixture	Mechanicsville
4574	" " " "	Strawberry Mixture	Baltimore
4719	" " " "	Sullivan's Sure Success	Monrovia
4560	" " " "	The Old Stand-by R. B. Super-Phos., an Am. Dis. Animal Bone.	Baltimore
4552	" " " "	Tomato Compound	Baltimore
4069	" " " "	7% Potato Guano	Mechanicsville
4568	" " " "	7% Potato Guano	Baltimore
4663	Beck, Walker & Brown, Chestertown, Md.	Corn Super-Phosphate	Chestertown
4662	" " " "	Tomato Super-Phosphate	Chestertown
*4259	" " " "	Try Me Super-Phosphate	Chestertown

*Re-published from February Bulletin to correct error, was *printed* as 1 per cent of Ammonia guaranteed when none was guaranteed.

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4573	3.70	3	.....	.....	5.27	12.52	11	17.79	16	$25.73	$22.00
4575	2.11	2	.....	.....	1.44	17.22	15	18.66	.....	24.13	21.00
4601	2.69	2	.....	.....	.....	.....	.....	23.70	25	24.86	.....
4534	2.93	2.50	0.79	0.50	3.33	9.27	8	12.60	10.50	20.18	17.00
4562	2.81	2	2.52	2	6.48	5.90	11	12.38	.....	19.44	19.00
4554	1.79	1	2.15	1	1.77	10.18	8	11.95	.....	18.41	12.00
4541	.....	.....	.....	.....	1.74	17.31	14	19.05	15	13.84	11.20
4587	5.00	5	6.89	7	1.26	7.10	6	8.46	.....	29.61	28.00
4551	5.19	3	6.34	3	1.54	9.34	8	10.88	10.50	32.14	21.00
4608	10.01	10	2.70	2.50	1.91	6.11	5	8.02	7	39.60	38.30
4600	2.21	2	2.29	2	2.09	8.55	8	10.64	13	18.31	18.00
4616	.....	.....	2.10	2	2.02	11.32	10	13.34	.....	11.56	10.00
4571	1.76	2	10.16	10	2.23	6.42	5	8.65	7.50	23.78	22.00
4070	5.18	5	2.74	.....	2.35	9.47	.....	11.82	.....	29.04	.....
4574	5.73	4	3.76	5	1.36	10.37	7	11.73	10	31.86	25.20
4719	2.31	2	2.90	2	1.58	10.19	10	11.77	.....	20.65	18.00
4560	2.32	2	1.38	1	2.26	8.81	8	11.07	10.50	18.05	16.00
4552	2.79	2	2.28	2	2.91	9.37	8	12.28	.....	21.18	16.00
4069	6.05	7	3.38	5	2.12	9.15	6	11.27	8	31.52	32.80
4568	7.04	7	4.99	5	1.50	7.19	6	8.69	8	33.90	32.80
4663	0.55	0.50	3.10	4	0.32	7.55	8	7.87	.....	10.85	11.90
4662	2.18	2	3.45	2.50	0.36	7.75	8	8.11	.....	17.88	16.50
4259	.....	.....	3.01	3.00	1.73	8.84	10	10.57	11½	10.43	11.30

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4665	The Berg Company, Philadelphia, Pa.	Electric Raw Bone, Fine.	Elkton.... .....
4666	" " " "	Special $25 Bone Manure	Elkton..... .....
4582	D. Blocher & Co., Gettysburg, Pa.	High Grade Super-Phosphate of Bone.	Baltimore.....
4602	M. Bohanan & Co., Baltimore, Md.	Bohanan's Queen	Baltimore.....
4698	" " "	Leader for Tobacco and General Crops.	Baltimore.....
4697	Boykin & Stanley, Baltimore, Md.	Cerealite Top Dressing..	Baltimore.....
4677	Brumfield & Foster, Colora Md.	B. & F. Acid Phosphate and Potash.	Colora.....
4678	" " "	B. & F. Ammoniated Bone Phosphate.	Colora.....
4680	" " "	B. & F. Hard Times Ammoniated Phosphate	Colora.....
4676	" " "	B. & F. Potato Phosphate	Colora.....
4679	" " "	High Grade Acid Phosphate.	Colora.....
4635	John Bullock & Son, Baltimore. Md.	Pure Ground Raw Bone .	Baltimore .....
4733	Chemical Co. of Canton, Baltimore, Md.	Baker's Dissolved Bone Phosphate.	Alesia.....
4621	" " "	Baltimore Special	Baltimore .....
4721	" " "	Harrow Brand Wheat Grower.	Monrovia.....
4648	" " "	Potato Manure	Hood's Mills.....
4643	" " "	Pure Dissolved S. C. Bone	Baltimore.....
4722	" " "	Soluble Bone and Potash	Monrovia .....
4649	" " "	Special Wheat, Corn and Grass Mixture.	Hood's Mills.....
4673	R. L. Christie & Co., Baltimore, Md.	Farmers' Famous Phosphate.	Colora.....
4672	" " " "	Special for Corn and Oats	Colora.....
4674	" " " "	Sure Crop Ammoniated Phosphate.	Colora.....
4565	Clark's Cove Fertilizer Co., New York.	Great Planet "A" Double Strength	Baltimore.....

No.	NITROGEN Calcutlated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4665	4.57	4	....	.....	.....	....	.....	22.24	20	$26.63	.....
4666	3.22	2	2.32	2	6.68	6.51	7	13.19	9	21.16	$15.80
4582	1.04	2	1.51	2	2.09	11.31	8	13.40	10	16.78	16.80
4602	1.79	1.50	3.25	3	2.15	9.13	10	11.28	.....	18.61	17.50
4698	2.37	2.50	2.24	2.50	1.35	10.20	8	11.55	.....	20.09	18 00
4697	8.67	9	3.03	2.50	.....	....	.....	....	.....	29.04	29.50
4677	....	.....	1.64	2	3.70	11.61	10	15.31	.....	11.67	12.00
4678	1.96	2	2.26	2	1.33	9.91	9	11.24	10	18.58	17.40
4680	0.99	1	0.71	1	1.34	9.73	10	11.07	11	13.95	14.40
4676	1.04	1	3.76	5	1.10	7.84	7	8.94	8	15.16	15.40
4679	....	.....	....	.....	1.79	13.17	14	14.96	.....	10.54	11.20
4635	4.78	4.92	.....	... ...	.....	.....	.....	21.39	25.20	27.24	.....
4733	0.57	0.25	.....	.....	2.43	11.93	13	14.36	.....	11.74	11.15
4621	1.23	1	2.19	2	2.46	8.06	8	10.52	11	14.92	14 20
4721	0.84	0.50	1.16	1	2.10	10.83	10	12.93	12	12.76	10.90
4648	1.47	1	4.56	4.50	1.52	7.98	8	9.50	10	17.77	16.30
4642	....	.....	....	.....	2 19	13.17	13	15.36	15	10.54	10.40
4722	....	.....	2.18	2	1.81	9.90	10	11.71	.....	10.46	10.00
4649	1.03	1	2.24	2	2 47	8.71	9	11.18	11	15.03	14.80
4673	1.09	1	1.72	2	1 88	9.17	8	11.05	10	14.91	13.80
4672	1.96	2	2.35	2	1.80	9.46	13	11.26	.....	18.41	21.00
4674	1.04	1	2.99	3	2.03	8.71	11	10.74	13	15.63	17.80
4565	3.54	4	7.19	7	1.59	8.52	8	10.11	9	27.01	27.00

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling
4566	Clark's Cove Fert. Co., New York.	Potato and Hop Grower.	Baltimore
4681	E. A. Clendennin & Bro., Colora, Md.	Pure Ground Bone	Colora
4685	Josiah Cope & Co., Lincoln University, Pa.	Ammoniated Bone Phosphate.	Rising Sun
4690	" " "	Pure Ground Bone	Conowingo
4683	" " "	Soluble Bone and Potash	Rising Sun
4684	" " "	Try Me Bone Phosphate.	Rising Sun
4594	F. P. Covey, Federalsburg, Md.	Corn Phosphate	Baltimore
4655	" " "	Standard Bone Phosphate.	Federalsburg
4734	Crocker Fertilizer Co., Buffalo, N. Y.	Potato, Hop and Tobacco Phosphate.	Westminster
4736	" " " "	Crocker's New Rival Ammoniated Super-Phos.	Westminster
4735	" " " "	Crocker's Practical Ammoniated Phosphate	Westminster
4561	Wm. Davison & Co., Baltimore, Md.	"Bos" Ammoniated Super-Phosphate.	Baltimore
4564	" " " "	Dissolved S. C. Bone	Baltimore
4572	" " " "	High Grade Ammoniated Super-Phosphate	Baltimore
4585	" " " "	Pen-Mar Ammoniated Bone Phosphate.	Baltimore
4647	Lewis F. Detrick, Baltimore, Md.	Bone and Potash, 16 x 4 Mixture.	Baltimore
4570	" " " "	Gold Basis Bone Truck Phosphate.	Baltimore
4595	" " " "	Honest Dollar	Baltimore
4549	" " " "	Kangeroo Komplete Kompound.	Baltimore
4657	" " " "	Sockless and Shoeless	Cambridge
4654	Detrick Fertilizer & Chemical, Co., Baltimore, Md.	Corn Fertilizer	Secretary Wharf
4716	" " "	Corn Fertilizer	Mt. Airy
4729	" " "	Dissolved Bone	Silver Spring

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Volue per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4566	1.31	1.50	5.08	5	1.95	7.44	6	9.39	7	$17.23	$15.50
4681	4.62	4	.....	.....	.....	.....	.....	21.69	48	25.60	.....
4685	1.02	1	2.41	2	2.48	11.30	10	13.78	12	17.76	15.80
4690	4.88	4	.....	.....	.....	.....	.....	21.86	21	29.65	.....
4683	.....	.....	2.47	2	3.20	10.73	10	13.93	.....	11.69	12.00
4684	2.10	2	4.29	3	3.96	9.25	10	13.21	12	21.42	19.80
4594	1.10	.50	1.17	4.50	1.57	12.38	7	13.95	.....	17.48	13 00
4655	2.02	2	2.66	2	1.74	11.48	8	13.22	10	20.90	16.00
4734	2.85	2	3.05	3	0.96	10.11	10	11.07	10	22.10	19.40
4736	1.51	1.30	1.75	1.60	1.44	9.46	10	10.90	10	16.37	15.90
4735	1.56	0.62	1.15	1.08	1.75	7.73	8	9.48	8	14.26	11.34
4561	2.52	2.50	2.53	2.50	1.59	10.87	8	12.46	11	21.60	19.20
4564	.....	.....	.....	.....	2.01	13.34	13	15.35	16	10.67	10 40
4572	2.94	2.75	3.52	2.75	2.98	10.79	10	13.77	13	24.32	22 20
4585	1.65	1.40	3.42	2.50	3.29	7.79	8	11.08	10	17.48	15.50
4647	.....	.....	2.46	2.25	1.95	11.32	10	13.27	12.50	11.91	10.75
4570	6.04	7	5.06	5	1.22	7.48	6	8.70	8	31.26	32.80
4595	3.07	3.50	5.66	7	2.10	9.74	8	11.84	.....	25.45	25.50
4549	1.96	2	2.97	3	2.14	10.29	8	12.48	11 50	20.02	18.40
4657	1.12	1.25	1.44	1.25	1.65	10.14	8	11.79	.....	15.60	13.00
4654	1.04	1	2.03	2	1.19	10.72	10	11.91	11	16.35	15.40
4716	1.04	1	2.00	2	0.99	10.58	10	11.57	11	16.10	15.40
4729	2.53	2.50	.....	.....	1.75	11.48	10	13.23	12	19.77	18.30

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4597	Detrick Fertilizer & Chemical Co., Baltimore, Md.	Dissolved S. C. Bone	Baltimore
4723	" " "	Farmers' Friend Fertilizer.	Frederick
4718	" " "	Farmers' New Method Phosphate.	Mt. Airy
4643	" " "	Fish Mixture	Baltimore
4563	" " "	Fish Mixture	Baltimore
4546	" " "	Gold Eagle	Baltimore
4702	" " "	Imperial Compound	Cockeysville
4550	" " "	Potato Fertilizer	Baltimore
4717	" " "	Sea Fowl Guano	Mt. Airy
4535	" " "	Soluble Bone Phosphate and Potash Fertilizer.	Baltimore
4989	" " "	Special Mixture	Smithsburg
4536	" " "	Vegetable Compound	Baltimore
4656	L. E. P. Dennis & Son, Crisfield, Md.	Fish and Potash Mixture	Federalsburg
4623	" " "	Truck and Tomato Guano	Baltimore
4640	Dooley & Proctor, Delta, Pa.	Dissolved S. C. Bone	Baltimore
4703	J. W. Dorsey, Ellicott City, Md.	Ammoniated Phosphate.	Ellicott City
4704	" " " "	Stag Potato Phosphate	Ellicott City
4984	D. Englar, Jr., Medford Md.	No. 3 Bone Phosphate.	Medford
4985	Englar & Rinehart, Linwood, Md.	Ammoniated Bone Phosphate No. 2.	Linwood
4986	" " " "	No. 1 Ammoniated Bone Phosphate.	Linwood
4688	Eureka Fertilizer Co., Perryville, Md.	Alkaline Bone and Potash	Rising Sun
4689	" " "	Bone Meal	Rising Sun
4692	" " "	Corn and Potato Special.	Perrymansville

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4597	.....	.....	.....	.....	1.10	14.12	14	15.22	15	$11.30	$11.20
4723	1.15	1	1.14	1	0.88	10.53	8	11.41	10	15.47	12.80
4718	2.47	2.50	.....	.....	2.28	10.56	8	12.84	9	18.88	16.90
4643	1.93	2	2.22	2	0.95	10.63	8	11.58	10	19.02	16.80
4563	1.88	2	2.20	2	1.19	10.13	8	11.32	10	18.45	16.80
4546	3.23	3.50	5.11	5	1.83	8.96	6	10.79	7	24.49	21.90
4702	1.13	1	1.33	1	1.12	10.06	9	11.18	10.50	15.23	13.60
4550	2.47	2.50	4.02	4	1.82	10.59	8	12.41	9.50	22.75	20.10
4717	2.64	2.90	2.44	2	1.46	9.44	8	10.90	9.75	20.38	19.40
4535	.....	.....	2.03	2	1.35	10.39	10	11.74	12	10.62	10.40
4989	1.09	1	1.08	1	1.03	10.02	8	11.05	10	14.78	12.80
4536	6.44	7	4.04	4	1.30	8.69	7	9.99	9	32.68	32.80
4656	2.49	2.50	2.37	2.50	2.94	5.52	6	8.46	.....	16.54	16.00
4623	2.93	3	3.19	3	1.15	7.01	6	8.16	.....	19.45	18.00
4640	....	.. ....	.....	.....	1.71	14 20	14	15.91	.....	11.36	11.20
4703	1.81	1.50	1.39	1.50	2.38	7.92	9	10.30	10½	15.69	15.60
4704	3.07	3	3.87	4	1.14	8.45	9	9.59	11	21.99	22.80
4984	1.72	1.50	2.63	2	1.59	9.54	9.50	11.13	11	17.97	16.60
4985	1.69	1 80	2.23	1.83	1.16	10.30	11.99	11.46	.....	18.06	19.22
4986	3.21	2.50	1.06	1.34	1.50	10.12	11.31	11.62	... .	21.41	20.15
4688	.....	.....	2.01	2	2.99	12.54	11	15.53	12	12.64	13.40
4689	3.24	3	.....	.....	.....	.....	.....	27.38	25	33.27	.....
4692	0.97	1	2.48	3	3.33	9.76	9	13.09	11	16.48	15.00

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4668	Eureka Fertilizer Co., Perryville, Md.	Fish, Rock and Potash..	Leslie.....
4686	" " "	Pure Dissolved Bone.....	Rising Sun.. .....
4687	" " "	P. & P. Super-Phosphate.	Rising Sun.....
4578	Excelsior Guano Co., Baltimore, Md.	Excelsior No. 1 Peruvian Guano.	Baltimore.....
4739	Farmer's Fertilizer Co., Westminster, Md.	Acid Phosphate.	Westminster.....
4740	" " "	Bone Phosphate No. 2 ..	Westminster.....
4737	" " "	Bone Phosphate No. 3...	Westminster.....
4738	" " "	XX Bone Phosphate.....	Westminster.....
4559	W. S. Farmer & Co., Baltimore, Md.	Harvest Queen.....	Baltimore .....
4620	" " " "	Potato Compound.....	Baltimore .....
4619	" " " "	Standard Phosphate.....	Baltimore.....
4652	Farmers & Planters' Co., Salisbury, Md.	Fish Mixture, A Complete Plant Food.	Salisbury.....
4651	" " "	Trucker's Mixture, A Complete Plant Food.	Salisbury .....
4653	" " "	Special Fish Mixture, A Complete Plant Food.	Salisbury .....
4624	Wm R. Griffith, Baltimore, Md.	Slaughter House "G" Phosphate.	Baltimore .....
4633	Griffith & Boyd, Baltimore, Md.	Ammoniated Bone Phosphate.	Baltimore.....
4631	" " "	Farmers' Potato Manure.	Baltimore.....
4603	" " "	High Grade Acid Phosphate.	Baltimore.....
4743	" " "	Peerless Fertilizer.....	Westminster.....
4628	" " "	Spring Crop Grower.....	Baltimore .....
4545	" " "	Stable Manure Substitute	Baltimore.....
4629	" " "	Tobacco Grower.....	Baltimore.....
4705	" " "	Valley Fertilizer.....	Ellicott City.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4668	0.72	0.50	1.06	0.50	3.86	8.74	7	12.60	9	$10.98	$ 7.60
4686	2.22	2	.....	.....	5.46	11.44	12	16.90	15	20.28	19.20
4687	.....	.....	.....	.....	3.60	13.73	14	17.33	15	10.98	11.20
4578	4.62	5	2.48	3	1.90	8.58	8	10.48	... ...	25.68	26.00
4739	....	.....	... .	.....	1 85	13.71	14	15.56	.....	10.97	11.20
4740	1.71	2	3.31	2.50	2.20	9.45	9	11.65	10	18.93	17.90
4737	1 55	1.75	3.60	2.50	2.13	8.90	9	11.03	11	18.00	17.55
4738	1.10	1	3.12	3	1.40	9.00	9	10.40	10	15.98	15.40
4559	1.53	1.50	3.15	2.50	2.24	9.33	10	11.57	11.50	17.97	17.60
4620	1.68	1.50	3.07	2.50	2 59	8.98	10	11.57	11.50	18.13	17.60
4619	2.36	2.85	3.19	2.50	2.46	9.77	10	12.23	11.50	21.02	21.65
4652	3.30	2 50	2.17	2	2.85	8.03	8	10.88	.....	21.24	17.50
4651	3.53	3 50	3.06	4	3.23	8.35	8	11.58	.....	23.29	22.50
4653	3.65	3	2.13	2.50	2.79	7.76	8	10.55	.....	20.96	19.50
4624	2.31	2	2.61	2.25	1.53	10.02	5	11.55	5.50	20.17	13.45
4633	1.77	2	2.21	1.50	2.25	8.73	9	10.98	10	17.15	16.90
4631	0.89	1	9.96	9	2.18	7.66	8	9.84	20	21.16	20.00
4603	.....	.....	....	.....	2.12	13.69	14	15.81	15	10.95	11.20
4743	0.48	0.25	2.31	2	1 90	7.77	8	9.67	9	10.35	9.75
4628	1.86	2	4.73	4.50	2.25	8.28	7	10.53	8	20.24	17.90
4545	3.63	3.50	4.20	4	2.20	7.73	5	9.93	6	24.34	19.90
4629	3.02	3	3.05	3	2.25	7.83	8	10.08	9	20.84	20.40
4705	0.60	0.50	2.08	2	2.38	7.76	8	10.14	9	10.57	10.1

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4730	Griffith, Turner & Co., Baltimore, Md.	Acid Phosphate	Glyndon
4540	" " " "	Ammoniated Alkaline Plant Food.	Baltimore
4731	" " " "	Ammoniated Butchers' Bone.	Glyndon
4732	" " " "	Dissolved Bone	Glyndon
4646	" " " "	Soft Ground Bone	Baltimore
4557	" " " "	Soluble Bone Phosphate.	Baltimore
4741	N. I. Gorsuch & Son, Westminster, Md.	Bone XXXX	Westminster
4742	" " " "	Dissolved Raw Bone Phosphate.	Westminster
4745	Hanover Bone Fertilizer Co., Hanover, Pa.	Blood and Bone Compound.	Westminster
4749	" " "	Excelsior Combine	Westminster
4746	" " "	Farmers' Crop Winner	Westminster
4748	" " "	Hanover Dissolved Bone	Westminster
4744	" " "	Klondyke Special	Westminster
4696	" " "	Pure Bone Meal	Bel Air
4747	" " "	S. C. Bone	Westminster
4632	Hanway & Keen, Bel Air, Md.	H. G Standard Guano	Baltimore
4598	" " "	Special Mixture	Baltimore
4670	S. M. Hess & Bro., Philadelphia, Pa.	Keystone Bone Phosphate.	Leslie
4669	" " " "	Potato and Truck Manure	Leslie
4671	" " " "	Special Compound	Leslie
4707	W. H. Hood, Mt Airy, Md.	Special Mixture	Mt. Airy
4606	J. Horner. Jr., & Co., Baltimore, Md.	Ammoniated Raw Bone Super-Phosphate.	Baltimore
4059	" " " "	Day's Ammoniated Bone Phosphate.	Browningsville

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4730	.....	.....	.....	.....	2.24	12.88	14	15.12	15	$10.30	$11.20
4540	1.26	1	2.26	1.50	1.83	7.67	6.50	9.50	7.50	14.44	11.40
4731	1.61	1.50	1.60	1.50	2.16	8.29	9	10.45	10	15.58	15.40
4732	2.13	2	.....	.....	2.99	9.57	9	12.56	10	17.16	15.40
4646	4.11	3	.....	.....	11.55	3.77	11	15.32	25	20.72	20.00
4557	.....	.....	1.61	1.50	2.16	8.51	9	10.67	10	8.85	9.10
4741	0.26	0.25	1.87	1.50	1.60	7.36	8	8.96	9	8.86	8.85
4742	1.45	1.40	2.42	2.25	3.26	7.22	7	10.48	8	15.29	13.85
4745	1.01	1	2.07	2	1.85	8.75	8	10.60	9	14.59	13.40
4749	2.04	2	4.38	3	1.92	9.66	9	11.58	10	20.93	18.40
4746	0.65	0.50	3.02	1.50	1.85	8.45	7	10.30	8	12.10	8.80
4748	.....	.....	2.13	2	1.29	11.39	10	12.68	11	11.50	10.20
4744	2.52	2.50	5.00	5	1.32	9.15	9	10.47	10	22.24	21.90
4696	4.42	4	.....	.....	.....	.....	.....	20.37	23	24.61	.....
4747	.....	.....	.....	.....	1.95	14.18	14	16.13	15	11.34	11.20
4632	2.02	2	3.28	2.50	1.68	9.31	10	10.99	.....	19.33	18.50
4598	1.10	1	2.30	2	1.95	8.72	9	10.67	.....	15.10	14.00
4670	1.21	1	1.22	1	1.61	8.59	9	10.20	11	14.08	13.80
4669	1.93	3	6.16	6	1.80	8.08	8	9.88	.....	20.78	23.00
4671	1.11	1	3.03	4	1.29	10.63	8	11.92	9	17.51	15.40
4707	1.30	1	2.38	2	2.75	9.77	8	12.52	9.50	17.15	13.60
4606	2.96	2.50	1.62	2.50	2.19	10.96	8	13.15	12	22.34	19.60
4059	3.26	2	2.63	2	5.55	10.22	8	15.77	.....	24.85	16.00

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4730	Griffith, Turner & Co., Baltimore, Md.	Acid Phosphate	Glyndon
4540	" " " "	Ammoniated Alkaline Plant Food.	Baltimore
4731	" " " "	Ammoniated Butchers' Bone.	Glyndon
4732	" " " "	Dissolved Bone	Glyndon
4646	" " " "	Soft Ground Bone	Baltimore
4557	" " " "	Soluble Bone Phosphate.	Baltimore
4741	N. I. Gorsuch & Son, Westminster, Md.	Bone XXXX	Westminster
4742	" " " "	Dissolved Raw Bone Phosphate.	Westminster
4745	Hanover Bone Fertilizer Co., Hanover, Pa.	Blood and Bone Compound.	Westminster
4749	" " "	Excelsior Combine	Westminster
4746	" " "	Farmers' Crop Winner	Westminster
4748	" " "	Hanover Dissolved Bone	Westminster
4744	" " "	Klondyke Special	Westminster
4696	" " "	Pure Bone Meal	Bel Air
4747	" " "	S. C. Bone	Westminster
4632	Hanway & Keen, Bel Air, Md.	H. G Standard Guano	Baltimore
4598	" " "	Special Mixture	Baltimore
4670	S. M. Hess & Bro., Philadelphia, Pa.	Keystone Bone Phosphate.	Leslie
4669	" " " "	Potato and Truck Manure	Leslie
4671	" " " "	Special Compound	Leslie
4707	W. H. Hood, Mt Airy, Md.	Special Mixture	Mt. Airy
4606	J. Horner. Jr., & Co., Baltimore, Md.	Ammoniated Raw Bone Super-Phosphate.	Baltimore
4059	" " " "	Day's Ammoniated Bone Phosphate.	Browningsville

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4730	.....	.....	.....	.....	2.24	12.88	14	15.12	15	$10.30	$11.20
4540	1.26	1	2.26	1.50	1.83	7.67	6.50	9.50	7.50	14.44	11.40
4731	1.61	1.50	1.60	1.50	2.16	8.29	9	10.45	10	15.58	15.40
4732	2.13	2	.....	.....	2.99	9.57	9	12.56	10	17.16	15.40
4646	4.11	3	.....	.....	11.55	3.77	11	15.32	25	20.72	20.00
4557	.....	.....	1.61	1.50	2.16	8.51	9	10.67	10	8.85	9.10
4741	0.26	0.25	1.87	1.50	1.60	7.36	8	8.96	9	8.86	8.85
4742	1.45	1.40	2.42	2.25	3.26	7.22	7	10.48	8	15.29	13.35
4745	1.01	1	2.07	2	1.85	8.75	8	10.60	9	14.59	13.40
4749	2.04	2	4.38	3	1.92	9.66	9	11.58	10	20.93	18.40
4746	0.65	0.50	3.02	1.50	1.85	8.45	7	10.30	8	12.10	8.80
4748	.....	.....	2.13	2	1.29	11.39	10	12.68	11	11.50	10.20
4744	2.52	2.50	5.00	5	1.32	9.15	9	10.47	10	22.24	21.90
4696	4.42	4	.....	.....	.....	.....	.....	20.37	23	24.61	.....
4747	.....	.....	.....	.....	1.95	14.18	14	16.13	15	11.34	11.20
4632	2.02	2	3.28	2.50	1.68	9.31	10	10.99	.....	19.33	18.50
4598	1.10	1	2.30	2	1.95	8.72	9	10.67	.....	15.10	14.00
4670	1.21	1	1.22	1	1.61	8.59	9	10.20	11	14.08	13.80
4669	1.93	3	6.16	6	1.80	8.08	8	9.88	.....	20.78	23.00
4671	1.11	1	3.03	4	1.29	10.63	8	11.92	9	17.51	15.40
4707	1.30	1	2.38	2	2.75	9.77	8	12.52	9.50	17.15	13.60
4606	2.96	2.50	1.62	2.50	2.19	10.96	8	13.15	12	22.34	19.60
4059	3.26	2	2.63	2	5.55	10.22	8	15.77	.....	24.85	16.00

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4556	J. Horner, Jr., & Co., Baltimore, Md.	Dissolved Slaughter House Bone Dust.	Baltimore.....
4547	" " " "	Slaughter House Bone Dust.	Baltimore.....
4555	" " " "	The Cultivator.....	Baltimore.....
4576	Hubbard & Co., Baltimore, Md.	Climax Super-Phosphate	Baltimore.....
4659	" " "	Columbia Gem Phosphate	Easton.....
4658	" " "	Crescent Soluble Crop Producer.	Easton.....
4064	" " "	Dissolved S. C. Rock....	Long Green .....
4537	" " "	Farmers' I X L Superphosphate.	Baltimore.....
4611	" " "	H. G. Soluble S. C. Phosphate.	Hillsboro.....
4065	" " "	Kainit.....	Long Green.....
4061	" " "	Nitrate of Soda.....	Long Green.....
4715	" " "	Oriental Phosphate for Wheat and Grass.	Mt. Airy.....
4712	" " "	Soluble Bone Phosphate	Mt. Airy.....
4714	" " "	Standard Bone Superphosphate	Mt. Airy... .....
4063	" " "	Sulphate of Potash.....	Long Green.....
4062	" " "	Tankage.....	Long Green.....
4538	" " "	Truckers' 7% Royal Seal Compound.	Baltimore.....
4713	" " "	Wheat Growers' Jewel..	Mt. Airy.....
4569	M. P. Hubbard & Co., Baltimore, Md.	Bermuda Guano for Early Truck.	Baltimore .....
4548	" " " "	Celebrated Dissol'd Bone Phos. for General Use.	Baltimore.....
4539	" " " "	Farmers' Acme Fertilizer	Baltimore.... .....
4596	" " " "	Farmers' Old Economy..	Baltimore.....
4074	" " " "	Havana Special Fertilizer for Tobacco	Hollywood.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4556	2.64	2.50	.....	.....	5.06	11.28	12	16.34	15	$21.22	$20.70
4547	6.87	6	.....	.....	.....	.....	.....	19.44	20	32.18	.....
4555	2.97	2.50	2.24	2.50	2.48	8.94	7	11.42	9	21.08	17.80
4576	1.30	1	1.82	1.50	1.84	9.84	8	11.68	10	16.30	13.30
4659	0.36	1.50	1.72	1.50	1.53	10.51	8	12.04	10	13.92	14.80
4658	.....	.....	.....	.....	2.67	9.81	10	12.48	11	7.85	8.00
4064	.....	.....	.....	.....	1.74	15.28	14	17.02	.....	12.22	11.20
4537	2.01	2	1.65	1.75	2.06	10.83	7	12.89	18	19.33	15.35
4611	.....	.....	.....	.....	1.62	14.12	14	15.74	.....	11.30	11.20
4065	.....	.....	12.58	23*	.....	.....	.....	.....	.....	12.58	.....
4061	19.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4715	1.45	1	1.51	1.50	2.04	10.74	8	12.78	10	17.42	13.30
4712	.....	.....	2.33	2	1.68	11.13	10	12.81	11	11.57	10.30
4714	2.22	2	2.30	2	1.98	10.89	9	12.87	10	20.64	17.40
4063	.....	.....	48.58	90*	.....	.....	.....	.....	.....	.....	.....
4062	9.43	10	.....	.....	.....	.....	.....	10.01	.....	28.68	.....
4538	6.96	7	4.78	4	1.95	8.30	5	10.25	.....	34.74	30.00
4713	2.00	1.50	1.62	1.50	2.20	10.75	10	12.95	11	19.25	16.40
4569	7.34	7	4.53	4	1.01	6.38	7	7.39	8.50	33.90	32.60
4548	2.67	2.50	1.51	2	1.49	11.46	9	12.95	10.50	21.58	19.10
4539	2.35	2	2.85	2	1.78	8.93	7	10.71	8.50	19.54	15.60
4596	0.85	0.50	1.64	1.50	1.41	9.53	8	10.94	10	14.28	11.80
4074	2.47	2	3.55	2.50	2.41	8.62	9	11.03	10.50	20.54	.....

*Sulphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4567	M. P. Hubbard & Co., Baltimore, Md.	H. G. Soluble S. C. Phosphate.	Baltimore.....
4586	T. R. Hubbard & Son, Chestertown, Md.	Our Peerless Fertilizer..	Baltimore.....
4664	" " "	Special Mixture	Chestertown.....
4661	" " "	Victor Phosphate.....	Chestertown.....
4699	T. C. Hunter, White Hall, Md.	Extra Ammoniated Bone Phosphate.	White Hall.....
4630	L. Kellum & Co., Baltimore. Md.	Ammoniated A No. 1, Bone Phosphate.	Baltimore.....
4988	C. M. Keedy, Keedsyville, Md.	Money Saving Phosphate.	Keedysville.....
4708	Lazaretto Guano Co., Baltimore, Md.	Alkaline Phosphate.....	Mt. Airy.....
4724	" " " "	Ammoniated Bone Phosphate.	Woodsboro.....
4709	" " " "	Bone Compound for Wheat, Corn and Oats.	Mt Airy.....
4706	" " " "	Forsythe and Linthicum Mixture.	Ellicott City.....
4645	" " " "	Pure Dissolved S. C. Bone.	Baltimore..... ...
4675	" " " "	Retriever Animal Bone Fertilizer.	Colora.....
4700	Lister Agricultural Chem. Works, Newark, N. J.	Ammoniated Dissolved Bone Phosphate.	White Hall.....
4644	" " "	Animal Bone and Potash.	Baltimore.....
4577	" " "	Fertilizer for Peas.....	Baltimore.....
4701	" " "	Fertilizer for Potatoes...	Glencoe.....
4639	" " "	Fertilizer for Strawberries and Vines.	Baltimore.....
4604	" " "	Fertilizer for Tomatoes..	Baltimore.....
4553	" " "	Harvest Queen.....	Baltimore.....
4667	" " "	Pure Raw Bone Meal....	North-East.....
4599	" " "	Pure Raw Bone Meal....	Baltimore.....
4583	" " "	Special Crop Producer..	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4567	.....	.....	.....	.....	1.15	15.00	14	16.15	.....	$12.00	$11.20
4586	1.49	1.25	3.61	4	1.56	7.80	9	9.36	.....	16.50	16.75
4664	3.05	2½	5.75	5	2.21	8.06	8	10.27	.....	23.89	20.50
4661	0.97	0.50	3.49	3	1.09	11.26	7	12.31	.....	17.80	11.50
4699	1.33	1.50	5.05	4	2.25	8.40	8	10.65	.....	18.34	16.50
4630	2.49	2.50	2.97	2	1.80	9.90	10	11.70	12	21.06	20.30
4988	1.11	1.50	4.75	3	7.06	5.49	.....	12.55	20	16.39	.....
4708	.....	.....	2.08	2	1.28	11.38	11	12.66	12	11.44	11.00
4724	1.05	1	2.19	2	1.86	8.86	9	10.72	10	14.94	14.40
4709	1.42	1.25	2.41	2.50	1.51	10.63	10	12.14	11	17.90	16.65
4706	2.44	2.25	4.19	4	4.68	8.77	9	13.45	13.50	22.19	21.55
4645	.....	.....	.....	.....	1.48	14.43	14	15.91	15	11.54	11.20
4675	2.42	2.25	4.16	4	4.71	8.98	9	13.69	13.50	22.28	21.55
4700	1.71	2.20	2.13	1.50	1.94	10.67	9	12.61	11	18.73	17.50
4644	.....	.....	5.21	5	1 20	9.70	9	10.90	.....	13.21	14.00
4577	1.74	2	2.17	2	1.32	11.27	9.50	12.59	.....	19.20	17.50
4701	.....	.....	5.27	5	1.55	9.37	9	10.92	.....	13.43	14.00
4639	1.53	2	3.24	2.50	4.11	7.64	.....	11.75	10	17.11	18.50
4604	1.95	2	2.10	2	3.60	8.58	8	12.18	.....	17.97	16.00
4553	1.82	1.80	2.19	2	1.66	12.66	9.50	14.32	11.50	20.97	17.70
4667	3.34	3.25	.....	.....	.....	....	.....	24.68	23	26.89	.....
4599	3.52	3.26	.....	.....	.....	.....	.....	23.43	23	27.92	.....
4583	1.30	1	1.14	1	3.10	7.14	7	10.24	8	13.42	11.40

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4533	Lister Agricultural Chem-Works, Newark, N. J.	Special Potato Fertilizer.	Baltimore.....
4625	" " "	Standard Pure Bone Super Phosphate of Lime	Baltimore.....
4612	T. H. Longfellow, Greensboro, Md.	Farmers' Delight No. 1..	Greensboro.....
4614	" " "	Spring Mixture.....	Greensboro.....
4613	" " "	Truck and Berry Fertilizer	Greensboro.....
4896	Mapes Formula & Peruvian Guano Co., New York.	Complete Manure "A" Brand.	Cambridge.....
4759	" " "	Grain and Grass Spring Top Dressing.	Baltimore.....
4797	Maryland Fertilizer Co., Baltimore, Md.	Dissolved S. C. Bone....	Baltimore.....
4976	" " "	Globe Complete Manure	Smithsburg.....
4977	" " "	Linden Super-Phosphate.	Smithsburg.....
4798	" " "	Sangston's Cereal and Plant Food.	Baltimore.....
4767	" " "	Tornado Fertilizer.	Baltimore.....
4866	Maryland Grange Agency, Baltimore.	Agency's Favorite H. O. D.	Baltimore.....
4790	" " "	Corn and Potato Phosphate.	Baltimore.....
4835	" " "	Patron's Bone Mixture...	Baltimore.....
4778	F. Maynard, Baltimore, Md.	H. G. Truckers' Pride...	Baltimore.....
4973	Geo. W. Miller, Baltimore, Md.	Royal Wheat, Corn and Grass Mixture.	Loys.....
4775	Miller Fertilizer Co., Baltimore, Md.	Corn and Oats Phosphate.	Baltimore.....
4825	" " "	Dissolved Raw Bone	Baltimore.....
4765	" " "	Ground Bone.....	Baltimore.....
4764	" " "	Harvest Queen Phosphate.	Baltimore.....
4795	" " "	H. G. S. C. Bone.....	
4821	" " "	No. 1 Potato Phosphate..	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4533	1.75	2	2.18	3	1.74	10.19	8	12.97	.....	$18.32	$17.00
4625	2.83	2.85	1.92	1.50	2.55	9.69	10	12.24	12	21.12	20.85
4612	0.96	1	1.45	4	2.47	7.72	8	10.19	9	13.04	15.40
4614	0.57	0.50	1.37	2	1.09	7.51	7	8.60	8	9.31	9.30
4613	1.26	1.50	3.10	4	1.96	9.22	7	11.18	8	16.88	15.90
4896	3.58	3	2.67	2.50	4.78	8.00	10	12.78	12	23.32	21.50
4759	6.05	6	7.07	7	2.08	5.59	5	7.67	6	31.64	30.00
4797	.....	.....	....	.....	0.98	14.96	14	15.94	14.50	11.97	11.20
4976	2.00	2	1.51	1.50	3.57	8.72	9	12.29	10	17.66	16.90
4977	.....	.....	3.04	2.50	0.79	11.50	11	12.29	12	12.40	11.50
4798	1.46	1.25	2.73	2.25	4.16	8.65	10	12.81	11	17.42	16.40
4767	0.63	0.50	3.05	3.25	1.54	11.83	11	13.37	12	17.39	16.15
4866	2.58	.....	1.88	.....	4.61	11.41	.....	16.02	.. ....	22.87	.....
4790	1.54	1	2.31	2.25	1.66	8.68	9	10.34	10	16.27	14.65
4835	2.28	2	4.39	2.50	6.45	6.71	10	13.16	15	20.60	20.50
4778	4.87	3	2.77	2.50	2.54	6.43	5	8.97	7	24.83	17.30
4973	1.13	1	2.25	2	2.09	8.65	9	10.74	10	14.83	14.00
4775	1.29	1	1.57	1.50	1.40	7.39	7	8.79	9	13.39	12.30
4825	2.31	2.50	....	.....	2.44	10.80	11	13.24	14	18.71	19.70
4765	3.46	3	....	.....	...	....	.....	15.17	15	21.19	.....
4764	1.48	1.25	2.35	2.25	1.88	10.61	10	12.49	11.50	18.15	13.60
4795	.....	... .	....	.....	1.80	14.39	14	16.19	.....	11.51	11.20
4821	4.35	4.50	6.50	7	1.06	8.22	8	9.28	9	28.19	28.90

16.60

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4774	Miller Fertilizer Co., Baltimore, Md.	No. 2 Potato Phosphate.	Baltimore.....
4794	" " "	S. C. Bone.....	Baltimore.....
4806	" " "	S. C. Rock.....	Baltimore..... ...
4796	" " "	Special Tomato Grower.	Baltimore.....
4753	" " "	Special Potato Fertilizer.	Baltimore.....
4773	" " "	Standard Super Phosphate of Lime.	Baltimore.....
4918	Monumental Chem. Co., Baltimore, Md.	Arundel Complete.....	Perrymanville.....
4833	" " "	Dissolved Animal Bone..	Baltimore.....
4861	" " "	Monumental Potato Manure.	Baltimore.....
4881	A. J. Morse, Hoffman's, Va.	Dry Fish	Pocomoke.....
4932	G. R. Mowell, Glencoe, Md.	Dissolved S. C. Rock....	Glencoe.....
4933	" " "	Standard Bone Phosphate.	Glencoe.....
4930	Nickerson Fertilizer Co., Easton, Md.	Dissolved Animal Bone.	Joppa.....
4929	" " "	Ground Bone.....	Joppa.....
4813	" " "	H. G. Vegetable Compound.	Baltimore..... ...
4814	" " "	Truck Guano.....	Baltimore.....
4890	" " "	Victor.....	Secretary Wharf...
4786	J. B. Nichols & Son, Baltimore, Md.	Farmers' Friend Guano.	Baltimore.....
4917	North-Western Fertilizer Co , Chicago, Ill.	H. S. B. National Bone Dust.	Lapidum.....
4857	G. Ober & Sons Co., Baltimore, Md.	Avondale Ammoniated Dissolved Bone.	Baltimore..... ...
4810	" " "	Dissolved Animal Bone.	Baltimore.....
4803	" " "	Dissolved Bone Phosphate.	Baltimore.....
4809	" " "	Dissolved Bone Phosphate and Potash.	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4774	2.47	2	4.25	4	3.75	8.37	8	12.12	9	$21.53	$18.40
4794	.....	.....	....	.....	1.94	13.91	14	15.85	.....	11.13	11.20
4806	.....	.....	....	.....	1.50	14.12	14	15.62	.....	11.30	11.20
4796	2.05	2	2.33	2	1.79	8.32	8	10.11	10	17.52	16.80
4753	1.23	1	5.11	5	1.41	6.98	7	8.39	.....	16.34	15.80
4773	3.26	2.85	2.25	2.25	1.31	10.05	10	11.36	11.50	22.60	21.40
4918	1.72	2	1.75	2	1.29	15.16	8	16.45	9.50	22.59	16.60
4833	1.89	2	.....	.....	3.15	13.32	12	16.47	.....	20.25	18.00
4861	0.93	1	3.38	4	0.55	6.70	6	7.25	7	13.17	13.40
4881	8.74	11	.....	.....	1.34	7.48	.....	8.82	... .	34.24	.....
4932	.....	.....	.....	.....	1.96	13.35	14	15.31	15	10.68	11.20
4933	2.22	2	2.01	2	2.32	8.91	10	11.23	11	18.51	18.40
4930	0.89	0.50	....	.....	4.16	11.86	9	16.02	10	16.19	10.90
4929	4.56	3	.....	.....	.....	.....	.....	22.46	45	30.94	.....
4813	3.59	3	3.71	3	0.88	8.02	6	8.90	9	22.85	18.40
4814	2.29	2	2.59	2.50	0.79	7.65	8	8.44	9	17.43	16.90
4890	0.63	0.50	2.29	2	2.86	9.21	6	12.07	7	12.12	8.50
4786	2.94	4	3.91	4	2.68	7.90	7	10.58	.....	21.70	23.00
4917	3.09	2.50	0.82	0.54	1.79	7.69	8	9.48	10	18.50	16.84
4857	3.25	2.25	2.26	1.50	3.31	8.91	3.50	12.22	6.25	22.24	12.85
4810	3.76	2.50	.....	.....	2.50	11.27	10	13.77	12	23.55	17.90
4803	.....	.....	.....	.....	0.80	15.03	14	15.83	.....	12.02	11.20
4809	.....	.....	2.22	2	0.67	11.46	10	12.13	12	11.52	10.20

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4766	G. Ober & Sons Co., Baltimore, Md.	Farmers' Mixture	Baltimore
4762	" " "	Farmers' Standard Ammoniated Phosphate.	Baltimore
4785	" " "	Fish Bone and Potash Mixture.	Baltimore
4771	" " "	Fish Rock and Potash Mixture.	Baltimore
4754	" " "	Pure Bone Meal	Baltimore
4763	" " "	Special Ammoniated Dissolved Bone.	Baltimore
4750	" " "	Special Compound for Tobacco.	Baltimore
4829	" " "	Special Plant Food	Baltimore
4837	Pacific Guano Co., New York, N. Y.	Dissolved Bone Phosphate of Lime.	Ridgely
4836	" " "	Dry Ground Fish	Ridgely
4756	Patapsco Guano Co., Baltimore, Md.	Baltimore Soluble Phosphate	Baltimore
4788	" " "	Coon Brand Guano	Baltimore
4787	" " "	Corn Fer., also Tomato, Oats and all Sum. Veg'bls	Baltimore
4934	" " "	Pure Dissolved S. C. Bone.	Cockeysville
4965	" " "	Sea Gull Guano	Fowblesburg
4838	Piedmont-Mt. Airy Guano Co., Baltimore, Md.	Caroline Mixture	Greensboro
4807	" " "	Dissolved S. C. Bone	Baltimore
4840	" " "	Insula Guano	Greensboro
4841	" " "	Piedmont Potato Producer.	Greensboro
4815	" " "	Pure Raw Bone Mixture.	Baltimore
4839	" " "	Royal Ammoniated Bone and Potash.	Greensboro
4820	" " "	Special Truck Fertilizer for Tomatoes, etc.	Baltimore
4868	R. H. Pollock, Baltimore, Md.	Ammoniated Bone Phosphate.	Baltimore

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4766	1.01	1	1.85	2	0.79	12.79	9	13.58	11	$17.99	$14 80
4762	2.79	2	1.97	2	0.41	10.18	8	10.59	10.50	20.68	17.00
4785	3.49	3.25	4.44	3.50	1.88	7.45	7	9.33	9	23.11	21.05
4771	2.73	3.25	3.20	3.50	1.72	9.70	7	11.42	9	21.78	21.05
4754	4.34	4	.....	.....	.....	.....	.....	23.39	22	28.50	.....
4763	1.80	0.50	2.59	2	0.83	10.62	9	11.45	11.50	18.94	13.50
4750	3.52	3	3.18	3	3.05	8.36	8	11.41	10	23.32	20.80
4829	2.05	2	4.51	5	0.89	11.55	9	12.44	10	22.87	20.40
4837	.....	.....	.....	.....	2.05	13.91	14	15.94	15	11.13	11.20
4836	9.46	9	.....	.....	3.29	4.35	7	7.64	.....	34.05	34 00
4756	.....	.....	2.08	2	0.89	12.30	11	13.19	12	12.10	11.00
4788	1.01	1	2.68	3	1.93	9.03	9	10.96	10	15.51	15.40
4787	1.64	1.50	2.09	2	2.45	9.24	9	11.69	11	17.23	16.30
4934	.....	.....	.....	.....	0.92	14.87	14	15.79	.....	11.90	11.20
4965	1.02	1	1.27	1	2.63	8.33	8	10.96	9	13.71	12.40
4838	1.21	1	1.80	2	1.52	9.64	8	11.16	9	15.68	13.40
4807	.....	.....	.....	.....	0.95	15.07	10	16.02	13	12.06	8.00
4840	0.68	0.50	1.98	2	1.59	6.32	5	7.91	7	9.40	7.90
4841	2.90	3	5.12	6	2.15	6.44	5	8.59	7	21.12	20.80
4815	1.23	1	1.19	1	1.53	6.89	7	8.42	11	12.38	12.60
4839	1.47	1.36	4.22	3	1.48	6.58	6	8.06	8	15.80	13.88
4820	2.08	2	2.08	2	2.13	9.82	9	11.95	11	18.99	17.80
4868	1.79	2	2.03	2	2.64	7.89	10	10.53	11	16.35	18.40

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4826	R. H. Pollock, Baltimore, Md.	Dissolved Animal Bone.	Baltimore.....
4768	" " "	Dissolved S. C. Bone...	Baltimore.....
4867	" " "	Ground Animal Bone...	Baltimore.....
4791	" " "	Soft Ground Bone.....	Baltimore.....
4751	" " "	Special Potato and Tobacco Fertilizer.	Baltimore.....
4777	" " "	Superior Corn and Tomato Fertilizer.	Baltimore.....
4752	" " "	Victor Bone Phosphate..	Baltimore.....
4858	Powell Fertilizer & Chemical Co., Baltimore.	Dissolved Soluble Bone Phosphate.	Baltimore.....
4792	" " "	Green Bag.....	Baltimore.....
4824	" " "	Red Bag Fertilizer.....	Baltimore.....
4958	Ramsburg Fertilizer Co., Frederick, Md.	Alkaline Phospho-Potassium...	Frederick.....
4961	" " "	Corn and Potato Fertilizer.	Walkersville.....
4957	" " "	Dissolved Animal Bone.	Frederick.....
4949	" " "	Dissolved Bone Super-Phosphate.	Mt. Airy.....
4951	" " "	Excelsior Plant Food...	Mt. Airy.....
4956	" " "	Excelsior Tobacco Compound.	Frederick.....
4955	" " "	Old Virginia Compound	Frederick.....
4802	Rasin Fertilizer Company, Baltimore, Md.	Acid Phosphate.....	Baltimore.....
4758	" " "	Ammoniated Alkaline Phosphate.	Baltimore..... .....
4769	" " "	Bone and Potash.....	Baltimore.....
4801	" " "	Dissolved Bones.....	Baltimore.....
4757	" " "	Empire Guano.....	Baltimore.....
4946	" " "	I X L Fertilizer.....	Hood's Mills .....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4826	2.77	2.50	....	.....	3.62	11.38	12	15.00	.....	$21.14	$19.50
4768	.....	.....	....	.....	1.54	14.93	14	16.47	16	11.94	11.20
4867	6.04	4	.....	.....	.....	.....	.....	17.98	22	28.64	.....
4791	3.95	3	.....	.... ..	10.01	6.30	14	16.31	.....	20.15	23.00
4751	2.74	2.50	3.71	4	1.60	9.45	9	11.05	10	22.02	20.90
4777	1.77	1	2.23	2	2 36	9.14	9	11.50	10	17.62	14.40
4752	.....	.....	1.35	1	3.54	9.09	9	12.63	10	9.33	8.40
4858	.....	.....	....	.....	2.20	13.01	14	15.21	16.50	10.41	11.20
4792	4.81	6	6.25	8	3.16	5.44	5	8.60	.....	27.63	31.00
4824	0.74	2	1.12	2	0.86	8.16	8	9.02	10	11.84	16.80
4958	0.90	1.25	2.17	3	2.22	10.26	10	12.48	.....	16.02	16.75
4961	1.71	1	1.96	2	3.20	9.76	8	12.96	10	18.13	13.80
4957	2.61	2	.....	.....	6.10	10.71	10	16.81	13	20.98	17.20
4949	.....	.....	.....	.....	2.00	15.74	14	17.74	16	12.60	11.20
4951	2.84	2	0.88	1	4.45	11.34	9	15.79	11	22.52	16.80
4956	2.22	2	1.38	2	1.43	14.94	8	16.37	... .	23.55	16.00
4955	1.59	1	1.90	2.10	2 57	10.45	9	13.02	11	18.15	14.90
4802	.....	.....	.....	.....	1.46	15.02	14	16.48	15	12.02	11.20
4758	2.42	1.50	1.49	1.25	2.35	8.55	8	10.90	9	13.40	14.15
4769	.....	.....	1.48	1.25	1.20	13.20	12	14.40	13	12.28	11.05
4801	2.36	2	.....	.....	4.67	10.02	10	14.69	12	18.97	16.40
4757	2.41	2.43	1.52	1.50	2.45	9.41	8	11.86	10	19.14	17.59
4946	1.28	1.25	3.32	3	1.14	10.15	9	11.29	.....	17.77	15.75

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4822	Rasin Fertilizer Company, Baltimore, Md.	Special Potato Fertilizer	Baltimore.....
4818	Isaac Robinson, Baltimore, Md.	Standard Dissolved Bone Phosphate.	Baltimore..... ..
4923	Henry Reckord Man'f'g Co , Bel Air, Md.	Ammoniated Bone Phosphate.	Bel Air.....
4847	" " "	Dissolved S. C. Bone...	Baltimore.....
4863	" " "	Fine Ground Bone.....	Baltimore .....
4922	" " "	H. G. Dissolved Bone, Blood and Potash.	Bel Air.....
4924	" " "	Raw Bone.....	Bel Air.....
4846	" " "	Special Compound.....	Baltimore.....
4904	J. S. Reese & Co., Baltimore, Md.	Ammoniated Bone Phosphate Mixture.	Elkton.....
4903	" " "	Half and Half.....	Elkton.....
4974	Rinehart & Co., Union Bridge, Md.	Bone Phosphate No. 2...	Union Bridge.....
4975	" " "	Bone Phosphate No. 3...	Union Bridge.....
4859	W. E. Robinson, Vale, Md.	Tomato Grower.....	Baltimore.....
4823	" " "	Vegetable Ferlilizer.....	Baltimore.....
4916	Isaac Robinson, Baltimore, Md.	Fish, Rock and Potash.	Conowingo.....
4780	" " "	H. G. Soluble Phosphate	Baltimore.....
4848	" " "	Pennsylvania Special....	Baltimore... .....
4843	" " "	Potashed Bone.....	Baltimore.....
4800	" " "	Pure Dissolved Bone....	Baltimore.....
4869	" " "	Pure Dissolved Raw Bone	Baltimore.....
4864	" " "	Special Corn & Oats Phosphate.	Baltimore.....
4772	" " "	Spec. Pot. & Tom. Phos. for Vegetables Gen'lly	Baltimore.....
4897	Scott Fertilizer Company. Elkton, Md.	Bush River H. G. Compound	Aberdeen.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4822	2.64	2.50	6.58	5	2.05	9.50	8	11.55	9	$24.94	$20.90
4818	1.06	1	2.00	2	1.30	9.52	10	10.82	11.50	15.22	15.60
4923	1.46	1.25	1.67	2	3.08	8.62	9	11.70	17	15.90	14.75
4847	.....	.....	.....	.....	1.80	13.99	14	15.79	.....	11.20	11.20
4863	3.44	3	.....	.....	.....	.....	.....	24.81	25	29.18	.....
4922	4.74	5	4.87	5	3.69	7.32	7	11.01	8	27.89	27.00
4924	4.72	5.29	.....	.....	.....	.....	.....	18.84	20.38	23.79	.....
4846	2.24	2.03	2.15	2.13	2.19	8.99	10.68	11.18	13.18	18.74	18.90
4904	1.26	1	1.63	3	1.27	12.10	10	13.37	12	18.02	16.80
4903	1.14	1	1.22	1	1.06	12.55	8	13.61	11	17.61	13 20
4974	1.96	1.55	2.38	2.50	2.20	7.75	8.27	9.95	24	16.89	15.42
4975	1.24	0.75	2.09	3.21	1.64	7.75	8.09	9.39	20	14.22	13.55
4859	3.80	4	3.21	2.75	3.16	8.41	10	11.57	.....	24.32	24.75
4823	2.26	2	2.88	2	2.11	9.01	10	11.12	11	19.51	18.40
4916	0.45	0.25	1.10	0.50	4.90	4.91	5	9.81	12	7.36	6.25
4780	.....	.....	.....	.....	1.89	13.82	14	15.71	.....	11.06	11.20
4848	2.64	2	4.42	5	4.75	7.03	7	11.78	8.50	21.27	18.60
4843	.....	.....	1.42	2	2.93	10.07	10	13.00	12	10.65	10.40
4800	2.88	2.50	.....	.....	2.01	11.75	11	13.76	14	21.19	19.70
4869	2.32	2.50	.....	.....	2.11	11.01	11	13.12	14	18.81	19.70
4864	2.06	1.75	2.17	2	2.24	7.98	7	10.22	8.75	17.23	15.35
4772	2.07	2	2.01	2.25	1.49	8.52	7.50	10.01	10	17.34	16.75
4897	3.30	3 50	7.99	7	3.85	9.13	9	12.98	.....	28.76	26.50

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4913	Scott Fertilizer Company, Elkton, Md.	Elk Head Super-Phosphate.	Elkton
4912	" " "	Potato Fertilizer No. 2.	Elkton
4898	" " "	Pure Dissolved Bone.	Aberdeen
4899	" " "	Pure Ground Bone	Aberdeen
4910	" " "	Standard Phosphate	Elkton
4911	" " "	Sure Growth Compound	Elkton
4909	" " "	Sure Growth Super-Phosphate.	Elkton
4907	" " "	Tip Top Soluble Bone	Elkton
4908	" " "	Tip Top Soluble Bone and Potash.	Elkton
4968	Charles Schaeffer, Westminster, Md.	Big Gun	Westminster
4967	" " "	Governor	Westminster
4970	" " "	Leader	Westminster
4964	" " "	Robert's H. G. Acid Phosphate.	Westminster
4969	" " "	Super A	Westminster
4900	Sharpless & Carpenter, Philadelphia.	No. 1 Bone Phosphate	Aberdeen
4915	" " "	Dissolved S. C. Phosphate.	Leslie
4901	" " "	Gilt Edge Potato and Tobacco Manure.	Aberdeen
4914	" " "	Royal Spring Mixture for all Crops.	Leslie
4982	Jas. D. Simmons, Hagerstown, Md.	Wheat and Clover Producer.	Hagerstown
4939	Slingluff & Co., Baltimore, Md.	Alkaline Super-Phosphate.	Ellicott City
4938	" " "	Ammoniated Bone	Ellicott City
4948	" " "	British Mixture	Woodbine
4937	" " "	Dissolved S. C. Bone	Ellicott City

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed	Found.	Guaranteed.		
4913	1.20	1	1.22	2	1.64	10.39	8	12.03	10	$15.87	$13.80
4912	2.65	2	4.65	4	3.81	8.59	8	12.40	.....	22.71	18.00
4898	3.09	2.50	.....	.....	2.00	13.50	13	15.50	15	23.57	21.30
4899	4.84	4	.....	.....	.....	.....	.....	22.88	22	24.52	.....
4910	1.43	1.50	2.35	2	3 13	9.13	8	12.26	10	17.02	15.30
4911	3.76	4.50	7.46	7	2.19	8.14	8	10.33	.....	27.76	28.50
4909	2.15	2	2.27	2	3.47	9.42	9	12.89	11	19.53	17.80
4907	.....	.....	.....	.....	2.95	14.68	14	17.63	.....	11.74	11 20
4908	.....	.....	2.20	2	3.59	12.82	11	16.41	.....	13.90	10.80
4968	2.23	2	1.96	2	1.02	12.77	10	13.79	.....	21.83	18.00
4967	1.64	1.50	2.74	2.50	2.17	8.94	9	11.11	.....	17.47	16.00
4970	1.13	1	1.77	1.50	1.45	8.50	8	9.95	.....	14.24	12.50
4964	...	.....	.....	.....	1.20	15.08	14	16.28	.....	12.06	11.20
4969	0.89	0.75	1.45	1	1.17	7.80	7.50	8.97	8.50	12.39	11.15
4900	2.18	2.50	2.27	2	1.16	9.97	8.50	11.13	.....	19.24	18.00
4915	.....	.....	.....	.....	0.99	15.64	14	16.63	.....	12.51	11.20
4901	2.69	2.25	9.96	10	1.00	9.32	8.50	10.32	.....	27.94	25.25
4914	1.57	1	3.50	1	1.39	8.10	8	9.49	.....	17.07	12.00
4982	1.31	2	5.56	5	5.24	11.17	12	16.41	.....	22.76	23 00
4939	....	.....	1.93	2	0 51	11.26	10	11.77	.....	10.94	10.00
4938	2.64	2.50	2.62	2.50	1.45	9.66	9	11.11	.....	20.78	19.00
4948	2.35	2.50	2.53	2.50	4.56	10.94	8	15.50	.....	22.34	18 00
4937	.....	.....	.....	.....	1.07	15.70	14	16.77	.....	12.56	11.20

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4941	Slingluff & Co., Baltimore, Md.	Half and Half	Ellicott City
4811	" " "	McAfee's Potato Grower.	Baltimore
4966	" " "	Slingluff's Bone	Westminster
4919	" " "	Soluble Super-Phosphate	Laurel
4944	" " "	Special Bone Phosphate.	Sykesville
4942	" " "	Standard Complete Manure.	Ellicott City
4845	" " "	Truckers' Favorite	Baltimore
4920	Southern Fertilizer Co., York, Pa.	Ammoniated Dissolved Bone.	Laurel
4831	" " "	Dissolved Bone Phosphate.	Baltimore
4851	" " "	Export Bone and Potash.	Baltimore
4849	" " "	Fine Raw Bone	Baltimore
4808	" " "	General Crop Grower	Baltimore
4921	" " "	Pure Bone Meal	Bel Air
4852	" " "	Pure Ground Bone	Baltimore
4068	" " "	Special Potato Grower	Upper Cross Roads
4850	" " "	Special Potato Grower.	Baltimore
4971	Geo. W. Stocksdale, Thurmont, Md.	Ammoniated Super-Phosphate.	Thurmont
4972	" " "	Dissolved Animal Bone Phosphate.	Thurmont
4981	J. W. Stonebraker & Son, Hagerstown, Md.	Champion	Hagerstown
4781	Wm. H. Street & Co., Baltimore, Md.	Ammoniated Dissolved Bone.	Baltimore
4926	" " "	Ground Bone	Fallston
4816	" " "	H. G. Bone Phosphate	Baltimore
4832	" " "	S. C. Bone	Baltimore

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4941	1.52	1.75	.....	.....	9.81	10.80	8	20.61	42	$19.28	$26.85
4811	1.83	1.50	3.54	4	1.35	10.97	9	12.32	.....	20.54	17.50
4966	2.79	2	.....	.....	2.41	13.19	10	15.60	.....	22.52	16.00
4919	.....	.....	.....	.....	1.09	13.36	14	14.45	16	10.69	11.20
4944	1.22	1	.....	.....	2.08	13.64	12	15.72	18	18.13	15 40
4942	1.97	2	2.12	2	2.26	10.96	8	13.22	10	19.89	16.80
4845	3.19	3.75	2.90	3	1.60	12.02	9	13.62	.....	25.13	23.25
4920	1.92	2	2.31	2 50	1.14	10.72	10	11.86	.....	19.25	18 50
4831	.....	.....	.....	.....	1.49	14.45	14	15.94	.....	11.56	11 20
4851	1.77	2	2.56	2	5.85	6.42	.....	12.27	25	16.63	18.00
4849	5.65	4.50	.....	.....	.....	.....	.....	17.73	45	27.85	.....
4808	0.68	0.50	1.86	2	1.39	9.14	8	10.53	.....	11.49	9.90
4921	3.33	3	.....	.....	.....	.....	.....	17.68	30	23.82	.....
4852	3.35	4	.....	.....	.....	.....	.....	18.20	40	22.79	.....
4068	2.29	1.50	2.47	4	2.54	10.05	8	12.59	.....	20.41	16.50
4850	1.77	1.50	3.97	4	2.31	8.33	8	10.64	.....	18.53	16.50
4971	0.95	1	2.54	2.25	1.89	8.62	9	10.51	.....	14.77	14.25
4972	1.54	1.25	2.63	2.25	2.54	8.23	8	10.77	.....	16.50	14 00
4981	2.87	2	4.11	4	1.95	8.98	10	10.93	.....	22.48	20.00
4781	1.78	1.50	2.30	2	2.15	10.01	9	12.16	10	18.51	15.90
4926	3.51	4	.....	.....	...	.....	.....	21.52	35	28.03	.....
4816	2.60	2.50	2.91	3	4 46	7.78	8	12.24	10	20.27	19.30
4832	.....	.....	.....	.....	1.84	14.03	14	15.87	16	11.24	11.20

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4817	Wm. H. Street & Co., Baltimore, Md.	S. C. Rock	Baltimore
4819	" " "	Special Phosphate	Baltimore
4927	" " "	Special Phosphate	Fallston
4953	Susquehanna Fertilizer Co., Baltimore, Md.	Pure Dissolved Bone	Mt Airy
4952	" " "	Superior Rock Phosphate	Mt. Airy
4936	Talbott & Clark, Ellicott City, Md.	Ammoniated Bone Phosphate.	Ellicott City
4931	H. S. Taveau & Co., Baltimore, Md.	Dissolved S. C. Bone	Baltimore
4827	" " "	Special Compound No. 2	Baltimore
4828	" " "	Wonder	Baltimore
4979	John Taylor, Trenton, N. J.	Pure Bone Meal	Keedysville
4855	I. P. Thomas & Son Co., Philadelphia, Pa.	Fish Guano	Baltimore
4854	" " "	Potato Manure	Baltimore
4853	" " "	Tip Top Raw Bone Superphosphate	Baltimore
4856	" " "	Tobacco Fertilizer	Baltimore
4980	Thompson & Edwards, Chicago, Ill	Pure Fine Ground Bone	Keedysville
4875	The Wm. B. Tilghman Co., Salisbury, Md.	Fish Mixture	Salisbury
4877	" " "	Irish P. Mixture	Salisbury
4876	" " "	Mixture "Bee"	Salisbury
4880	W. C. Todd, Williston, Md.	Standard Bone Phosphate	Baltimore
4878	E S. Truitt, Salisbury, Md.	Fish Mixture XX, a Com. Fertilizer for allcrops	Salisbury
4886	Tygert Allen Fertilizer Co., Philadelphia, Pa.	Ammoniated Bone Phosphate	Pocomoke
4882	" " "	Gold Edge Potato Manure	Pocomoke
4885	" " "	S. C. Rock	Pocomoke

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4817	.....	.....	.....	.....	1.62	14.55	14	16.17	15.50	$11.64	$11.20
4819	1.19	0.50	1.60	1	1.48	7.39	7	8.87	8.50	13.15	10.10
4927	0.75	0.50	1.06	1	1.20	6.83	7	8.03	8.50	10.62	10.10
4953	2.28	2	.....	.....	3.34	12.98	16	16.32	.....	21.16	22.00
4952	.....	.....	.....	.....	1.31	14.47	14	15.78	15	11.58	11.20
4936	2.08	2	3.34	4	2.54	8.60	9	11.14	14	19.20	21.00
4931	.....	.....	.....	.....	1.56	14.30	13	15.86	14	11.44	10.40
4827	2.27	2	2.14	2	2.33	8.50	9	10.83	10	18.38	17.40
4828	3.05	3	4.79	5	1.56	10.36	8	11.92	9	24.92	22.40
4979	3.85	3.50	.....	.....	.....	.....	.....	27.96	55	32.04	.....
4855	2.13	2	4.89	2	2.15	9.48	9.50	11.63	.....	22.10	17.50
4854	3.01	3	6.50	6	0.32	11.13	9	11.45	10	26.79	24.40
4853	2.81	3	4.10	2.75	0.78	11.27	10	12.05	13	24.11	22.95
4856	3.17	2.50	7.56	7	0.91	11.45	9	12.36	.....	29.99	23.50
4980	3.02	3	....	.....	.....	.....	.....	26.85	22	31.29	.....
4875	3.11	3.50	2.07	1	2.81	6.63	6	9.44	.....	19.15	17.50
4877	5.88	7	5.85	5	2.81	5.87	6	8.68	.....	30.65	32.00
4876	4.30	4	3.49	3	2.55	6.81	8	9.36	.....	24.22	23.00
4830	1.82	1.50	2.59	2	3.99	9.44	9	13.43	11	19.09	16.30
4878	3.35	3	2.16	2	2.28	6.96	8	9.24	10	20.08	19.80
4886	1.23	1.50	1.22	1.25	1.60	8.97	8	10.57	9	14.52	14.15
4882	2.39	3	5.67	5	1.50	6.05	6	7.55	7	19.52	20.40
4885	.....	.....	....	.....	1.71	13.93	14	15.64	15	11.14	11.20

No	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4902	Tygert Allen Fertilizer Co., Philadelphia, Pa.	Star Bone Phosphate....	Elkton.....
4884	" " "	Star Soluble Bone and Potash.	Pocomoke.....
4887	" " "	(E H. D) Super-Phosphate for all crops.	Pocomoke.....
4954	J. Tyson & Son, Frederick, Md	AmmoniatedSuper-Phosphate of Lime.	Frederick.....
4962	Virginia-Carolina Chemical Co., Richmond, Va.	Guaranteed 14% Acid Phosphate.	Gaithersburg.....
4960	" " "	Special Compound for Wheat.	Walkersville.....
4871	Joshua Walker, Baltimore, Md.	Victoria Bone.....	Baltimore.....
4945	W. H. D. Warfield, Sykesville, Md.	Potato Compound.....	Sykesville.....
4891	S. L. Webster & Son, Cambridge, Md.	No. 1 Ammoniated Bone Phosphate.	Cambridge.....
4889	" " "	No. 2 Ammoniated Bone Phosphate.	Secretary Wharf...
4892	" " "	Our Special 6% Guano.	Cambridge.....
4888	" " "	Poudrette Mixture.....	Secretary Wharf...
4893	" " "	The Times Bone Phosphate.	Cambridge.....
4880	F. M. Wilson & Co., Pocomoke, Md.	Favorite Truck Fertilizer.	Pocomoke.....
4879	" " "	Peninsula Ammoniated Super-Phosphate.	Pocomoke.....
4905	M. E. Wheeler & Co., Rutland, Vermont.	Grass and Oats.....	Elkton.....
4906	" " "	Royal Wheat Grower....	Elkton.....
4804	The Robt. A. Wooldridge Co., Baltimore, Md.	Triumph Pure Bone Phosphate.	Baltimore.....
4784	" " "	Golden Crown Animal Bone and Truck Phos.	Baltimore.....
4776	" " "	Liberty Bell Potash Mixture.	Baltimore.....
4812	" " "	Little Giant Phosphate..	Baltimore.....
4782	" " "	Special Potato Fertilizer	Baltimore.....
4844	" " "	Special Potato Fertilizer for Irish Potatoes.....	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4902	2.46	2 25	2.69	2.50	1.70	8.69	8.50	10.39	10.50	$19.44	$18.55
4884	.....	.....	2.08	2	1.60	9.42	10	11.02	11.50	10.26	10.30
4887	2.08	2	2.35	2	1.66	8.72	8	10.38	10	17.97	16.80
4954	1.31	2	1.29	1	3.30	10.70	7	14.00	.....	17.24	14.00
4962	.....	.....	.....	.....	3.02	13.51	14	16.53	.....	10.81	11.20
4960	1.07	1	1.13	1	2.53	8.67	8	11.20	.....	14.02	12.00
4871	.....	.....	0.84	1.25	1.99	12.02	12	14.01	13	10.86	11.05
4945	1.72	1.50	2.23	4	1.10	10.65	9	11.75	.....	18.48	17.50
4891	2.07	3 50	2.57	4.52	4.56	4.85	9.48	9.41	....	15.45	25.46
4889	1.93	2.50	2.53	2.50	1.08	5.77	7.48	6.85	9.53	14.52	18.30
4892	5.46	6	4.57	5	2.34	4.19	7	6.53	.....	26.08	30.00
4888	0.83	0.51	2.48	3.01	1.15	5.55	6.50	6.70	7.23	9.64	11.49
4893	0.26	0.50	2.71	2.50	1.35	8.40	9	9.75	9.65	10.48	11.33
4880	2.65	3	4.87	4	1.95	7.61	8	9.56	.. ....	21.21	21.00
4879	1.48	1	1.83	1.50	2.93	9.86	10	12.79	.....	17.30	14.50
4905	.....	.....	1.55	2	2.36	12.40	11	14.76	24	11.94	10.80
4906	1.09	1	2.55	2	1.37	9.42	8	10.79	9	15.79	13.40
4804	1.55	1.50	3.60	4	2.10	9.15	8	11.25	9	18.24	16.90
4784	6.17	7	4.14	5	2.49	7.45	7	9.94	8	31.10	33.40
4776	.....	.....	2.21	2	0.85	12.58	11	13.43	12	12.44	11 00
4812	1.06	1	2.14	2	1.60	9.70	9	11.30	10	15.66	14.40
4782	2.15	2	4.78	5	1.86	9.15	9	11.01	10	21.18	20.40
4844	2.15	2	4.77	5	1.74	9.61	9	11.35	20	21.53	20.40

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling.
4783	The Robt. A. Wooldridge Co, Baltimore, Md.	Sweep Stakes Sure Shot Phosphate.	Baltimore.....
4804	" " "	Triumph Pure Bone Phosphate.	Baltimore.....
4872	Zell Guano Co., Baltimore, Md.	Ammoniated Bone Super-Phosphate.	Baltimore.....
4865	" " "	Calvert Guano.....	Baltimore.....
4760	" " "	Dissolved Bone Phosphate.	Baltimore.....
4779	" " "	Dissolved Bone Phosphate and Potash.	Baltimore.....
4870	" " "	Economizer.....	Baltimore.....
4862	" " "	Pure Dissolved Animal Bone.	Baltimore..... ...
4761	" " "	Spcl. Comp. for Potatoes, Cabbage and other veg.	Baltimore.....
4805	" " "	Truck Grower for early vegetables.	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K_2O.		PHOSPHORIC ACID.					Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble Found.	Available.		Total.			
	Found.	Guaranteed.	Found.	Guaranteed.		Found.	Guaranteed.	Found.	Guaranteed.		
4783	2.93	3	7.76	8	1.39	8.33	7	9.72	8	$25.78	$24.40
4804	1.55	1.50	3.60	4	2.10	9.15	8	11.25	9	18.24	16.90
4872	2.07	2	2.19	2	1.59	10.11	8	11.70	10	19.15	16.80
4865	0.90	0.75	1.67	1.50	1.49	10.89	9	12.38	11	15.86	13.55
4760	....	.....	.....	.....	1.74	15.63	14	17.37	16	12.50	11.20
4779	.....	.....	1.04	1	1.35	13.42	12	14.77	14	12.05	11.00
4870	1.23	1	1.36	1	3.32	9.97	9	13.29	11	16.35	13.80
4862	2.64	2	.....	.....	0.41	13.73	14	14.14	15	21.81	20.80
4761	3.01	3	3.93	4	1.19	10.78	8	11.97	10	24.22	21.80
4805	5.22	5.50	4.24	4	1.84	8.40	7	10.24	9	29.04	28.30

Table Showing Mechanical Analysis of Ground Bone.

(The Chemical Analysis is Given in Preceding Table.)

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Fine, Less than 1-50 inch.	Fine Medium, 1-25 to 1-50 inch.	Medium, 1-25 to 1-12 inch,	Coarse, Larger than 1-12 inch.
4626	Baugh & Sons Co., Baltimore, Md.	Bone Meal, Warranted Pure.	21	60	19	0
4601	" " " "	Domestic Animal Bone Dust.	50	24	16	0
4665	The Berg Co., Philadelphia, Pa.	Electric Raw Bone, Fine... .	29	26	27	18
4635	J. Bullock & Son, Baltimore, Md.	Pure Ground Raw Bone.....	28	34	26	12
4681	E. A. Clendennin & Bro., Colora, Md.	Pure Ground Bone.....	21	30	31	18
4690	Josiah Cope & Co., Lincoln University, Pa.	Pure Ground Bone...	34	39	27	0
4689	Eureka Fertilizer Co., Perryville, Md.	Bone Meal.....	63	27	10	0
4696	Hanover Bone Fertilizer Co., Hanover, Pa.	Pure Bone Meal.....	27	28	41	4
4547	J. Horner, Jr. & Co., Baltimore, Md.	Slaughter House Bone Dust.	32	38	30	0
4599	Lister Agr'l and Chem. Works, Newark, N. J.	Pure Raw Bone Meal.....	30	50	20	0
4667	" " " "	Pure Raw Bone Meal.....	27	37	31	5
4765	Miller Fertilizer Co., Baltimore, Md.	Ground Bone.....	42	37	17	4
4929	Nickerson Fertilizer Co., Easton. Md.	Ground Bone	52	30	16	2
4754	G. Ober & Sons' Co., Baltimore, Md.	Pure Bone Meal.....	35	28	29	8
4867	R. H. Pollock, Baltimore, Md.	Ground Animal Bone.....	36	30	28	6
4863	Henry Reckord Mfg. Co, Bel Air, Md.	Fine Ground Bone.....	46	31	17	6
4924	" " " "	Raw Bone.....	17	33	37	13
4899	Scott Fertilizer Co., Elkton, Md.	Pure Ground Bone.....	25	28	41	6
4849	Southern Fertilizer Co., York, Pa.	Fine Raw Bone...	37	32	27	4
4921	" " " "	Pure Bone Meal.....	42	34	20	4
4852	" " " "	Pure Ground Bone.....	32	43	22	3
4926	W. H. Street & Co., Baltimore, Md.	Ground Bone.....	54	33	13	0
4979	John Taylor, Trenton, N. J.	Pure Bone Meal.....	35	36	29	0
4980	Thompson & Edwards, Chicago, Ill.	Pure Fine Ground Bone.....	60	23	13	4

SUPPLEMENTARY LIST OF FERTILIZERS LICENSED FOR SALE IN MARYLAND FOR THE YEAR ENDING FEBRUARY 1, 1899.

(Supplement to List Published in Maryland Experiment Station Bulletin No. 52, February, 1898. Corrected to August 15, 1898.)

ALEXANDRIA FERTILIZER AND CHEMICAL COMPANY, ALEXANDRIA, VA.

Dissolved S. C. Rock.

A. ANDERSON & CO., MT. AIRY, MD.

Harvest Queen Guano.

ARMOUR FERTILIZER WORKS, CHICAGO, ILL.

Ammoniated Bone With Potash.
Bone Meal.
Grain Grower.
Fruit, Root and Crop Special.
Wheat Special.

BALTIMORE GUANO CO., BALTIMORE, MD.

Salvador Guano.
Baltimore W. G. Special.
Farmers' Alkaline Bone.
Fish Guano.
Defiance Bone.
B. G. Ammoniated Bone
Farmers' Dissolved Bone.

BALTIMORE PULVERIZING CO., BALTIMORE, MD.

Farmers' Favorite Fertilizer (F. F. F.).
Special Mixture.

BALTIMORE SEED AND IMPLEMENT CO., BALTIMORE, MD.

Ammoniated Soluble Bone Phosphate.
Special Potato Fertilizer.
Standard Bone Phosphate.

BAUGH & SONS CO., BALTIMORE, MD.

Animal Bone and Potash Compound.
Bone Meal, Warranted Pure.
Double Eagle Phosphate.
Domestic Animal Bone Dust.
Dissolved Animal Bone.
Export Bone with Potash.
Fish Mixture.
General Crop Grower.
H. G. Acid Phosphate or Dissolved S. C. Rock.
H. G. Tobacco and Truck Fertilizer.
Potato Fertilizer.
Soluble Alkaline Super Phosphate.
Spencer & McGonigal's Crop Grower.
Tomato Compound.
Wheat Fertilizer.

BECK, WALKER & BROWN, CHESTERTOWN, MD.

Corn Super-Phosphate.
Propagator Super-Phosphate.
Tomato Super-Phosphate.
Trustworthy Super-Phosphate.
Try Me Super-Phosphate.

WM. BENDER'S MILLERS, MD .

Wm. Bender's Fertilizer.

THE BERG CO., PHILADELPHIA, PA.

Pure Raw Bone Fine.
$25 Bone Manure.

D. BLOCHER & CO., GETTYSBURG, PA.

H. G. Super Phosphate of Bone.

C. N. BOHANNAN & CO., BALTIMORE, MD.

Choice.
Leader.
Queen.

B. A. BETTS, CHEWSVILLE, MD.

Jos. Lister's Pure Bone Meal.

CHARLES E. BOND, SPENCERVILLE, MD.

Dissolved Rock.
Pure Ground Rock.

BRUMFIELD & FOSTER, COLORA, MD.

Ammoniated Bone Phosphate.
Acid Phosphate and Potash.
Hard Times Ammoniated Phosphate.
High Grade Acid Phosphate.
Potato Phosphate.

CHEMICAL COMPANY OF CANTON, BALTIMORE, MD.

Baker's Dissolved Bone Phosphate.
Baker's Special Wheat, Corn and Grass Grower.
Harrow Brand Wheat Grower.
Potato Manure.
Pure Dissolved S. C. Bone.
Soluble Bone and Potash.

R. L. CHRISTIE & CO., COLORA, MD.

Christy's Special for Corn and Oats.
Farmers' Favorite for Corn and Oats.
Sure Crop Ammoniated Phosphate.

CLARK'S COVE FERTILIZER CO., NEW YORK, N. Y.

Great Planet "A."
Potato and Hop Grower.

JOSIAH COPE & CO., LINCOLN UNIVERSITY, PA.

Acidulated Phosphate.
Ammoniated Bone Phosphate.
Pure Steamed Bone.
Soluble Bone and Potash.
Try Me Bone Phosphate.

F. P. COVEY, FEDERALSBURG, MD.

Standard Bone Phosphate.

CROCKER FERTILIZER AND CHEMICAL CO., BUFFALO, N. Y.

High Grade Serial Guano.

CUTSHALL & STIMMEL, WOODSBOROUGH, MD.

Ammoniated Bone.

W. S. FARMER & CO., BALTIMORE, MD

Potato Manure No. 1.

FARMERS AND PLANTERS' AGENCY, BALTIMORE, MD.

Ammoniated Bone.
Orient Guano.
Chandos Guano.

FARMERS' AND PLANTERS' CO., SALISBURY, MD.

Fish.
Special Fish.
Truckers'.

GRIFFITH & BOYD, BALTIMORE, MD.

Ammoniated Soluble Bone.
Ammoniated Bone Phosphate.
Bone Meal.
Cerial Bone Plant Food.
Farmers' Potato Manure.
H. G. Acid Phosphate.
Peerless Fertilizer.
Soft Ground Bone.
Stable Manure Substitute.
Spring Crop Grower.
Tobacco Grower.
Valley Fertilizer.

WM. R. GRIFFITH, BALTIMORE, MD.

Slaughter House (G) Phosphate.

GRIFFITH, TURNER & CO., BALTIMORE, MD.

Soluble Bone Phosphate.

HANOVER BONE FERTILIZER CO., HANOVER, PA.

Klondike Special Fertilizer.

HUBBARD & CO., BALTIMORE, MD.

Climax Super-Phosphate.
Columbia Gem Phosphate.
Crescent Soluble Crop Producer.
Farmers' IXL Super-Phosphate.
H. G. Soluble S. C. Phosphate.
Oriental Phosphate for Wheat and Grass.
Soluble Bone and Potash.
Standard Bone Super-Phosphate.
Truckers' 7 Per Cent. Royal Seal Compound.
Wheat Growers' Jewel.

C. M. KEEDY, KEEDYSVILLE, MD.

Money Saving Phosphate.

L. KELLUM & CO., BALTIMORE, MD.

A No. 1 Bone Phosphate.

LISTER'S AGRICULTURAL CHEMICAL WORKS, NEWARK, N. J.

Ammoniated Bone and Potash.
Ammoniated Dissolved Bone Phosphate.
Celebrated Ground Bone.
Fertilizer for Strawberry Vines.
Fertilizer for Tomatoes.
Fertilizer for Peas.
Harvest Queen.
Pure Bone Meal.
Pure Crop Producer.
Standard Pure Bone Super-Phosphate of Lime.
Special Potato Fertilizer.

J. H. LONGFELLOW, GREENSBORO, MD.

Farmers' Delight No. 1.
Spring Mixture.
Truck and Berry Fertilizer.
Wheat Grower.

MAPES' FORMULA AND PERUVIAN GUANO CO., NEW YORK, NEW YORK.

Grass and Grain Spring Top Dressing.

MARYLAND FERTILIZER AND MANUFACTURING CO., BALTIMORE, MD.

Tornado Fertilizer.

MILLER FERTILIZER CO., BALTIMORE, MD.

Corn and Oats Phosphate.
Dissolved Raw Bone.
Ground Bone.
Harvest Queen Phosphate.
No. 1 Potato Phosphate.
Special Potato Fertilizer.
Special Tomato Fertilizer.
Standard Phosphate.

MONUMENTAL CHEMICAL CO., BALTIMORE, MD.

Arundel Complete.
Dissolved Animal Bone.
Monumental Potato Manure.
Monumental Soluble Bone and Potash.
Progressive Ammoniated Bone.
Wm. Penn Crop Grower.

NICKERSON FERTILIZER CO., EASTON, MD.

Bone and Potash.
Dissolved Bone.
Ground Bone.
H. G. Vegetable Compound.
S. C. Phosphate.
S. C. Phosphate and Potash.
Truck Guano.
Victor.

NORTHWESTERN FERTILIZER CO., CHICAGO, ILL.

Horse Shoe Brand National Bone Dust.

PACIFIC GUANO CO., NEW YORK, N. Y.

Dissolved Bone Phosphate of Lime.
Dry Ground Fish.

PIEDMONT-MT. AIRY GUANO CO., BALTIMORE, MD.

Caroline Mixture for All Crops.
Special Truck Fertilizer for Tomatoes, &c.

R. H. POLLOCK, BALTIMORE, MD.

Dissolved S. C. Bone.
Soft Ground Bone.
Special Potato and Tobacco Fertilizer.
Special Wheat Grower.
Special Tomato Fertilizer.
Superior Corn and Tomato Fertilizer.
Victor Bone Phosphate.

POWELL FERTILIZER AND CHEMICAL CO., BALTIMORE, MD.

Green Bag Fertilizer.
Red Bag Fertilizer.

JOHN S. REESE & CO., BALTIMORE, MD.

Ammoniated Bone Phosphate Mixture.
Dissolved Phosphate of Lime.
Half and Half.

RASIN FERTILIZER CO., BALTIMORE, MD.

Our IXL. Fertilizer.
Special Potato Fertilizer.

RAMSBURG FERTILIZER CO., FREDERICK, MD.

Alkaline Phospho-Potassium.
Corn and Potato Fertilizer.
Dissolved Bone Super-Phosphate.
Dissolved Animal Bone.
Excelsior Plant Food.
Old Virginia Compound.
Tobacco Compound.

HENRY RECKORD MANUFACTURING CO., BEL AIR, MD.

Animal Bone Phosphate.
Dissolved S. C. Rock.
Fine Ground Bone.
H. G. Dissolved Bone, Blood and Potash.
Raw Bone.
Special Compound.

W. G. RINEHART, UNION BRIDGE, MD.

No. 2.
No. 3.

ISAAC ROBINSON, BALTIMORE, MD.

Peerless Phosphate.
Penna. Special Mixture.
Pure Dissolved Raw Bone.
Pure Raw Bone.
Special Corn and Oats Phosphate.
Special Potato and Tomato Phosphate.
Standard Dissolved Bone Phosphate.
Todd's Standard Bone Phosphate.

SCOTT FERTILIZER CO., EASTON, MD.

Elk Head Super-Phosphate.
Potato Fertilizer No. 2.
Pure Dissolved Bone.
Pure Ground Bone.
Standard Phosphate.
Sure Growth Compound.
Sure Growth Super Phosphate.
Tip Top Soluble Bone.
Tip Top Soluble Bone and Potash.

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J. D. SIMMONS, HAGERSTOWN, MD.

Wheat and Clover Producer.

SLINGLUFF & CO., BALTIMORE, MD.

Alkaline Super-Phosphate.
Bone Potash.
British Mixture.
Half and Half.
Soluble Super-Phosphate.
Southern Bright Tobacco Grower.
Standard Complete Manure.

SOUTHERN FERTILIZER CO., YORK, PA.

Fine Raw Bone.
Hood's Special Mixture for Grain and Grass.
Soluble Bone and Potash.

D. A. SHARRETTS, WOODSBORO', MD.

Ammoniated Super-Phosphate.
Bone Phosphate.

CHARLES SCHAEFFER, WESTMINSTER, MD.

Big Gun.
Governor.
Leader.
S. C. Bone.
Super A.

GEO. W. STOCKDALE, THURMONT, MD.

Ammoniated Super-Phosphate.
Dissolved Animal Bone.

J. W. STONEBRAKER & SON, HAGERSTOWN, MD.

Champion Fertilizer.

W. H. STREET & CO., FALLSTON, MD.

Ammoniated Dissolved Bone.
High Grade Bone Phosphate.

J. W. SULLIVAN, MONROVIA, MD.

Sure Success.

H. S. TAVEAU & CO., BALTIMORE, MD.

South Carolina.

TALBOT & CLARK, ELLICOTT CITY, MD.

Ammoniated Bone Phosphate.

WM. H. TENNEY & SON, WASHINGTON, D. C.

R. B. Tenney's Pure Ground Bone.

D. A. THOMAS, HAGERSTOWN, MD.

Bone Mixture.
Dissolved Bone.
Farmers' Mixture.
Fine Raw Bone.
S. C. Bone.

I. P. THOMAS & SON, PHILADELPHIA, PA.

Far's Choice Bone Phosphate.
Fish Guano.
Potato Manure.
Tip Top Raw Bone Super-Phosphate.

TURNER & SON, BETTERTON, MD.

"B" Bone Phosphate.
Special Tomato Compound.

J. TYSON & SON, FREDERICK, MD.

Ammoniated Super-Phosphate of Lime.

TYGART-ALLEN FERTILIZER CO., PHILADELPHIA, PA.

Dryden's Super Phosphate (F. H. D).
Gold Edge Potato Guano.

VIRGINIA-CAROLINA CHEMICAL CO., RICHMOND, VA.

Ammoniated Bone Phosphate.
Ammoniated Bone Phosphate.
Ammoniated Bone Phosphate ½-8-1.
Dissolved Bones.
Dissolved Bones 10-2.
Cutshall & Fogle's Dissolved Bone.
Guaranteed 14 Per Cent. Acid Phosphate.
Guaranteed 13 Per Cent. Acid Phosphate.
Special Compound for Wheat.
Standard Bone and Phosphate.

W. H. D. WARFIELD, SYKESVILLE, MD.

Potato Compound.

S. L. WEBSTER & SON, CAMBRIDGE, MD.

No. 2 or Special Wheat Grower.
Our 6 Per Cent.
Poudrette Mixture.
Times Brand.

RICHARD C. WELLS, BALTIMORE, MD.

Ammoniated XL Bone Phosphate.

ROBERT A. WOOLRIDGE & CO., BALTIMORE, MD.

Golden Crown.
Sweep Stakes.

ZELL GUANO CO., BALTIMORE, MD.

The Little Giant.

SLIDING SCALE AND IRREGULAR GUARANTEES.

Notwithstanding the fact that the fertilizer law (Sec. 2), requires the minimum and *Only* the minimum percentage of the various valuable ingredients of fertilizers to be stamped on the bags and prescribes a penalty of $100 fine for the violation of this provision, it seems remarkable that there still continues to be so many violations.

Although the majority of the users of fertilizers certainly know that a guarantee of 1 to 2 per cent. or 1 to 3 per cent. is only a guarantee of 1 per cent., it is probable that a few are misled by the array of big, but meaningless figures used, and which are probably used with the intention of misleading the buyer. The same may be said in regard to stating the amount of potash as sulphate of potash, a figure nearly twice as large as that representing the actual potash. Ammonia is sometimes given as sulphate of ammonia, which is four times the actual ammonia; and instead of phosphoric acid its equivalent in "bone phosphate" appears, the latter being 2 1-5 times the former.

Still more reprehensible is the trick occasionally resorted to of guaranteeing **"Alkaline salts equal to AMMONIA."** After the bags are dragged once or twice across a dirty floor the small letters are obliterated leaving the word **"AMMONIA"** followed by a guarantee of 10 to 15 per cent. Not quite so bad as the latter is the printing of a long analysis, including all of the unimportant material and trash in the fertilizer. This is never resorted to except when the valuable ingredients are very scarce.

Whenever it is apparent that any manufacturer is trying to hoodwink the buyer it is time for the latter to look to some other manufacturer for his fertilizers.

BRAND NAMES.

"Brand names of fertilizers in the past have partaken of much of the flavor of patent medicines, and many farmers have estimated them accordingly. It is striking that the most extravagant names have been very frequently attached to very low grade goods. Most of the larger manufacturers have adopted names having distinctive titles, which, by careful attention to compounding and the quality of the materials used, have become valuable trade-marks. People new to the trade are very prone to high-sounding names. They should keep in mind that extravagant claims must prove themselves, or confess to a sham. No manufacturer having money invested in machinery and stock can afford to damage his future custom by such means. A farmer learns by experience. He may bite several times in the course of his life, but he rarely bites at the same deception twice. If the loss of trade due to deceptive goods fell alone to the man responsible for them, we should certainly have no complaint to make; but, unfortunately, farmers place all fertilizers in the same class. When a local dealer offers goods without the mark of a responsible manufacturer, it is quite safe to suspect the goods, unless the character of the dealer is assured."—*The American Fertilizer.*

TO THE FARMERS OF THE STATE.

On another page is found the advertisement of the Maryland Agricultural College. This is peculiarly the college for the farmers of Maryland. Their sons will find here the information so sadly needed on the farms of the state. It is a confessed fact that the returns from tilling the land are not so great as they should be.

Many causes are operating to produce this result. Certainly not one among the least is the lack of an intelligent understanding of the land and its needs; the animal industry and its needs.

To be a successful agriculturist to-day, needs a wider range of information than is required in any of the many walks of life.

To successfully produce is only one-half the battle. Of equal importance is to successfully dispose of the completed product. Educate the boy professionally who is to take your place on the farm.

There is a far greater opportunity for well trained specialists in agricultural lines than in any of the so-called learned professions. Your boy can be fully qualified here to fill these positions. During the past year several opportunities have presented themselves for filling places of emolument and trust in these lines. As the years progress many more will arise. Are these positions to be filled by the sons of the farmers of Maryland or by others from States where the scientific side of the work is more fully appreciated? The importance of Agricultural Education is being recognized more and more each year.

We want Maryland in the vanguard of this progress. In order to accomplish this, those whose hands are at the work must support the instrumentality for its accomplishment. What will you do about it?

Respectfully,

R. W. SILVESTER,

President Maryland Agricultural College.

There are many Departments in the College. Information desired on any topic pertaining to your work can be obtained by applying to heads of the Departments given below. You will find all ready and anxious to serve you. Should any delay occur in answering attribute it to a failure to reach the party for whom intended and write again.

FACULTY AND ORGANIZATION.

R. W. SILVESTER,
President and Professor of Mathematics.

RICHARD H. ALVEY,
Vice-President and Professor of English and Civics.

Clough Overton, 1st Lieut. U. S. Cavalry, Professor of Military Science.
W. T. L. Taliaferro,.....Professor of Agriculture.
H. B. McDonnell, M. D., B. S.,.....Professor of Chemistry.
Martin P. Scott, M. D.,.....Professor of Natural History.
W. G. Johnson, A. M.,.....Professor of Entomology.
Jas. S. Robinson,.....Professor of Horticulture.
Thos. H. Spence,.....Professor of Languages.
Henry Lanahan, A. B.,....Professor of Physics and Civil Engineering.
H. Gwinner,.....Professor of Mechanics.
C. O. Townshend, Ph. D.,.....Professor of Botany and Pathology.
Samuel S. Buckley, B. S., D. V. S.,....Professor of Veterinary Science.
Wm. H. Zimmerman, M. S,.....Lecturer on Photography and Electro-Metallurgy.
Henry T. Harrison,.....Principal Preparatory Department.
F. P. Veitch, M. S.,
W. W. Skinner, B. S.,
J. R. Laughlin, B. S.,
Geo. W. Cameron, B. S.,
.....Assistant Chemists.
F. B. Bomberger, B. S.,.....Assistant in English and Mathematics.
Jos. R. Owens, M. D.,.....Registrar and Treasurer.

THE MARYLAND AGRICULTURAL COLLEGE,

COLLEGE PARK, MD.

MARYLAND'S SCHOOL OF TECHNOLOGY.

FOUR COURSES OF INSTRUCTION.

Agricultural, Mechanical, Scientific, Classical.

Each department supplied with the most modern and approved apparatus. Practical work emphasized in all departments. Graduates qualified to enter upon their life's work at once. New science hall will be completed and equipped by the fall opening.

PRACTICAL LABORATORIES FOR THE DEPARTMENTS OF CHEMISTRY, ENTOMOLOGY, PATHOLOGY, AGRICULTURE, HORTICULTURE, BIOLOGY, PHYSICS AND ENGINEERING.

Boarding department supplied with all modern improvements. New bath rooms and closets in an annex to the main building. Steam heat and gas, books, room, heat, light, washing, board, medical attention.

$154.00 FOR THE SCHOLASTIC YEAR.

$5.00 caution money on entrance. $6.00 for material for each laboratory. Payments made quarterly. A 120 page catalogue, giving full particulars, sent on application.

DAILY SANITARY INSPECTION BY PHYSICIAN TO COLLEGE ATTENTION IS CALLED TO THE SHORT COURSE OF TEN WEEKS IN AGRICULTURE.

Particulars sent on application. Term commences September 14th. Early application necessary for admittance.

R. W. SILVESTER,
President Maryland Agricultural College.

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